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THE
Gentleman's Diary,
OR THE

MATHEMATICAL REPOSITORY;
AN ALMANACK

For the YEAR of our LORD 1789:

BEING

FIRST AFTER BISSEXTILE.

Containing many useful and entertaining Particulars,
peculiarly adapted to the ingenious Gentlemen engaged
in the delightful Study and Practice of the

MATHEMATICKS.

The Forty-ninth ALMANACK published of this Kind;
and the Thirty-seventh of the NEW-STYLE in ENGLAND.

———— With wise Intent
The Hand of Nature on peculiar Minds
Imprints a different Byass, and to each
Decrees its Province in the common Toil.
To some she taught the Fabrick of the Sphere,
The changeful Moon, the Circuit of the Stars,
The golden Zones of Heaven: to others gave
To weigh the Moment of eternal Time,
Of Time, and Space, and Fate's Chain,
And Will's quick Impulse.



L O N D O N 1789

Printed for the Company of STATIONERS:

And Sold by ROBERT HORSFIELD, at their Hall in
LUDGATE-STREET. 1789.

[Price Nine Pence stitched.]

Two Solar and two Lunar ones.

May 9. at 3^h 31^m. past 9 in the morning the Moon will be eclipsed at 54' on the northern limb, but invisible here.

May 24th, the Sun will be eclipsed, but invisible here, the conjunction being at 10 h. 20 m. 30", in long. 25. 4° 3', D's lat. 30' 30" S central on the Merid. at 10 h. 18' in long. 154° West lat. 17° South.

Nov. 2, The Moon eclipsed visible. Begins 11 h. 27 m Middle 12 h 32 m. End 1 h. 36 m. in the morn. of the third. Digits eclipsed 3° 40' on the D's southern limb.

Nov 17th, in the morning, the Sun will be eclipsed, invisible here, the conjunction being at 3 h. 29 m. 3, but the eclipse will be central on the merid. 22 m. past 3 in long. 129° East, lat. 14° S.

Venus will be a morning star till the last of May, and then an evening star to the year's end.

Jupiter will be an evening star from Jan. 14th till Aug 2d, then a morning star.

A transit of the planet Mercury over the Sun will happen next year: it begins 1 h. 10 m. and ends 6 h. 4 m. aftern. Nov. 5.

Astronomers have some expectation this year of the return of the Comet observed by *Appian* in 1532, and by *Homelius* in 1661. The observations of the former are very defective and doubtful; and the perihelion distance, thence deduced, differs far more than it ought from that resulting from the observations of the latter; but, as the rest of the elements are remarkably near, it is generally concluded, that it was the same comet which each of them observed; and that its return towards the Sun may be expected in the spring of 1789.

ACKNOWLEDGEMENTS.

A Letter from Mr. *J. Fletcher* of Liverpool, containing ingenious answers to the 1. 9. 10. 11. and 15th. *quest.* for the use of last year's Diary, did not come to the Editor's hands till May 1788.

Through oversight, Mr. *A. Oliver's* name was omitted among the names of the answers of *quest.* 7th last year.

The information from *Tasso* of Bristol is thankfully received, viz. that the original hymn enquired after p. 23. Diary 1787, was inserted in the Gentleman's Magazine Feb. 1749 (signature Cato of Witney).

Mr. *Unwin's* Letter in Nov. 1787 came unopened to the Editor's hands in May 1788, for which reason he was disappointed of his prize Diaries. All letters concerning these prizes must be directed (post-paid) to Mr. Horsfield, who will deliver them to order any where in London. But all letters containing matter for the Diary must be directed only usual. For the Gentleman's Diary Stationer's Hall London. And must arrive there before the 1st of May 1789, otherwise they will be too late.

All Proposers of Questions in *Dynamics* and *Hydrodynamics*, if they wish to see them published, must send the answers with them.

It is not to be found in the world, to propose such questions; but the same as the famous problem of *three bodies*, which has puzzled the world for upwards of 100 years, and never yet been completely so

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JANUARY hath XXXI Days.

M D Dec. South.

First Quarter 4th Day, 24 m. past 4 Afternoon.

Full Moon 11th Day, 46 m. past 5 Afternoon.

Last Quarter 18th Day, at 39 m. past 8 Morning.

New Moon 26th Day, 21 m. past 6 Morning.

☉ enters ♍ 19th Day, 0 H. 38 M. Afternoon.

1	T	Circumcision.	9 a	36	3 a	40
2	F		10	41	4	22
3	S		11	46	5	2
4	D	2d Sunday after Christmas.	morn.		5	40
5	M	Old Christmas Day.		54	6	32
6	T	Epiphany, or Twelfth Day.	2	4	7	21
7	W		3	14	8	14
8	T	Lucian C. and M.	4	25	9	11
9	F		5	30	10	10
10	S		6	26	11	12
11	D	1st Sunday after Epiphany.	D rises.		12	12
12	M	Old New Year's-Day. Plough-Monday.	5 a	42	morn.	
13	T	Hilary B. and C. Cambridge T. begins.	7	8	1	11
14	W	Oxford Term beg. Days increased half	8	31	2	7
15	T	an hour.	9	53	3	0
16	F		11	13	3	52
17	S	Old Twelfth Day.	morn.		4	42
18	D	2d Sund. aft. Epiph. Prisca, V. & M.		30	5	32
19	M	Q. Charlotte's Birth-Day kept.	1	43	6	22
20	T	Fabian, B. et M. In 8 d. of St. Hil. 1 Ret	2	55	7	14
21	W	Agnes, V. & M.	3	58	8	6
22	T	Vincent, M.	4	52	8	50
23	F	Hilary Term begins at Westminster.	5	38	9	46
24	S		6	17	10	32
25	D	3d Sund. aft. E. Conversion of St. Paul.	6	48	11	22
26	M	Days increased 1 Hour.	D sets.		11	0
27	T	Pr. Aug. Fred. bo. 1773. In 15 days of	6 a	14		48
28	W	[St. Hilary 2 Ret	7	17	1	30
29	T		8	21	2	11
30	F	K. Charles I. Martyr. 1649.	9	23	2	52
31	S		10	32	3	32

D	☉ Rises	☉ Sets	Cl. bef. ☉	D. Break.	Sun East	Saturn So	Jupiter S.	Mars S							
1	8	4	3	56	4	23	5	59	4	41	3 a	46	0 m	7	11 m
6	8	1	3	59	6	38		57		43	3	26	1	41	11
11	7	56	4	4	8	41		53		46	5	6	1	25	11
16	7	50	4	10	10	28		49		50	2	46	11	50	11
21	7	43	4	17	11	59		44		54	2	27	11	25	11
26	7	36	4	24	12	10		38		58	2	8	11	0	11

FEBRUARY hath XXVIII Days.

First Quarter	3d Day, 25 m. past 9 Morning.	1	16°	53
Full Moon	10th Day, 8 m. past 4 Morning.	6	15	24
Last Quarter	16th Day, 10 m. past 10 Afternoon.	11	13	46
New Moon	23th Day, 14 m. past 1 Morning.	16	12	4
		21	10	17
		26	8	26

☉ enters ♋ 18th Day, 3 H. 28 M. Morning.

M W D D	Sundays, Holidays, Birth-Days, Terms, &c.	Moon R.&S.	Moon South.
1	4th Sunday after Epiphany.	11 a 41	4 a 19
2 M	Purification of B.V.M. or Candlemas-Day	morn.	5 6
3 T	Blasius, B.&M. On Mor. of Purif. 3 Ret.	49	5 56
4 W		1 56	6 49
5 T	Agatha. V. & M. Old St. Paul.	3 4	7 46
6 F		4 4	8 45
7 S		4 55	9 46
8 D	Septuagesima Sunday.	5 39	10 45
9 M	In 8 Days of Purif. 4 Ret.	6 14	11 43
10 T		D rises.	morn.
11 W		7 a 18	40
12 T	Hilary Term ends at Westminster.	8 13	1 34
13 F	Old Candlemas-Day. Days incr. 2 hours.	10 4	2 27
14 S	Valentine, B. & M.	11 22	3 20
15 D	Sexagesima Sunday.	morn.	4 13
16 M		38	5 6
17 T		1 44	5 58
18 W		2 44	6 50
19 T		3 34	7 41
20 F		4 13	8 30
21 S	Camb. Term divides now.	4 49	9 18
22 D	Quinquagesima, or Shrove-Sunday.	5 16	10 5
23 M		5 41	10 47
24 T	Shr. Tu. St. Matthias. Pr. Adol. Fr bo.	6 1	11 20
25 W	Ash-Wednesday. 1st Day of Lent.	D sets.	aft. 11
26 T		7 a 18	53
27 F		8 25	1 35
28 S	Days increased 3 hours.	9 32	2 19

D	☉ Rises	☉ Sets	☉ Cl. bef.	☉ D. Break.	☉ East	Sat. S.	Jup. S.	Mars S.
1	7 26	4 34	14 8"	5 30	5 4	1 a 40	10 a 33	11 m 20
6	7 17	4 43	14 34	22	9	1 29	10 11	11 22
11	7 8	4 52	14 39	14	15	1 12	9 50	11 18
16	6 59	5 1	14 25	6	2	0 5	9 29	11 15
21	6 49	5 11	13 54	4 57	27	0 37	9 8	11 11
26	6 20	5 21	13 7	48	33	0 20	8 4	11

MARCH hath XXXI Days.

M^o Decl:
D Sou'h.

First Quarter 4th Day, 51 m. past 10 Night.

Full Moon 11th Day, 50 m. past 1 Afternoon.

Last Quarter 18th Day, 15 m. past 2 Afternoon.

New Moon 26th Day, 46 m. past 6 Afternoon.

1	7° 17'
6	5 22
11	3 24
16	1 26
21	North 32
26	2 29

☉ enters ♍ 20^h Day, 3 H. 53 M. Morning.

1	D	1st Sunday in Lent.	David, A. Bp.	10	a	39	3	4	5
2	M	Chad, Bp.		11		48	3	54	
3	T				morn.		4	45	
4	W	Ember Week.				54	5	39	
5	T			1		53	6	35	
6	F			2		46	7	33	
7	S	Perpetua. Old St. Matthias.		3		23	8	31	
8	D	2d Sunday in Lent.		4		10	9	28	
9	M			4		42	10	25	
10	T			5		11	11	20	
11	W				D	rises.	morn.		
12	T	Gregory, B.		7	a	39		15	
13	F			9		0	1	9	
14	S			10		19	2	4	
15	D	3d Sunday in Lent.		11		33	2	59	
16	M				morn.		3	54	
17	T	Patrick.				38	4	48	
18	W	Edw. K. W. Sax.		1		32	5	40	
19	T			2		16	6	31	
20	F	Spring begins,		2		55	7	20	
21	S	Benedict, Ab.		3		26	8	7	
22	D	4th Sunday in Lent. Midlent Sunday.		3		50	8	52	
23	M			4		13	9	35	
24	T			4		34	10	17	
25	W	Annunciation of B. V. M. Lady-Day.		4		53	10	59	
26	T				D	fets.	11	41	
27	F			7	a	31	aft.	25	
28	S			8		39	1	11	
29	D	5th Sund. in Lent.		9		52	1	50	
30	M	Days 12 H. 45 M. long.		10		54	2	50	
31	T			11		56	3	4	

D	☉	Rises	☉	Sets	☉	l. bef.	☉	D. Break	☉	East	Saturn	S.	Jupiter	S.	Mars	S.
1	6	34	5	26	12	33"	4	43	5	37	0	a	10	8	35	11
6	6	24	5	36	11	35		32		43	11	m	54	8	16	11
11	6	14	5	46	10	6		21		49	11		30	7	57	10
16	6	4	5	56	8	40		11		55	11		22	7	38	10
21	5	54	6	6	7	10		0	6	2	11		6	7	20	10
26	5	44	6	16	5	37		2	48	8	10		50	7	2	10

A P R I L hath **XXX** Days.

M ☉ Decl.
D North.

First Quarter 3d Day, 30 m. past 8 Morning.
Full Moon 9th Day, 24 m. past 11 Night.
Last Quarter 17th Day, 50 m. past 7 Morning.
New Moon 25th Day, 57 m. past 9 Morning.

1	4	49
6	8	43
11	8	34
16	10	22
21	12	5
26	13	44

☉ enters 8 19th Day, 4 H. 38 M. Afternoon.

		morn.		
1	W		4	a 38
2	I	51	5	34
3	F	1	38	6 30
4	S	2	16	7 26
5	D	2	50	8 21
6	M	3	13	9 15
7	T	3	45	10 8
8	W	4	10	11 2
9	T	Drises		
10	F	7	a 58	morn. 57
11	S	9	16	52
12	D	10	26	1 47
13	M	11	28	2 43
14	T	morn.		
15	W		19	4 31
16	T	1	C	5 21
17	F	1	23	6 9
18	S	2	0	6 55
19	D	2	24	7 39
20	M	2	46	8 21
21	T	3	5	9 3
22	W	3	24	9 45
23	T	3	45	10 28
24	F	4	6	11 13
25	S	D sets.		
26	D	8	a 50	52
27	M	9	56	1 45
28	T	10	53	2 40
29	W	11	43	3 36
30	T	morn.		

D	☉	Rises	☉	Sets	Cl. bef.	☉	D. Break	☉	East	Saturn S.	Jupiter S.	Mars S
1	5	32	6	28	3' 46"	3	33	6	15	10 m 30	6 a 42	10 m 44
6	5	22	6	38	2 17		20	21	10	14	6 25	10 40
11	5	13	6	47	0 52		6	27	9	58	6 8	10 36
16	5	2	6	57	aft. 24	2	54	33	9	42	5 52	10 32
21	4	54	7	6	1 31		40	39	9	26	5 36	10 28
26	4	45	7	15	2 27		23	45	9	9	5 20	10 21

M A Y hath XXXI Days.

M Decl.
D North.

First Quarter 2d Day, 2 m. past 3 Afternoon.

Full Moon 9th Day, 22 m. past 9 Morning.

Last Quarter 17th Day, 44 m. past 1 Morning.

New Moon 24th Day, 20 m. past 10 Night.

First Quarter 31st Day, 44 m. past 7 Afternoon.

☉ enters ♌ 20th Day, 5 H. 12 M. Afternoon.

1	F	St. Philip & St. James Ap.	0	23	5	a	27
2	S		0	57	6		21
3	D	3d Sund. aft. Easter. Invent. of the Cr.	1	27	7		13
4	M	Easter T. 2 ret.	1	53	8		4
5	T		2	17	8		57
6	W	St. John Ev. ante Portam Latinam.	2	42	9		49
7	T		3	7	10		43
8	F		3	37	11		38
9	S		D riles.		morn.		
10	D	4th Sunday after Easter.	9	a	17		33
11	M	East. T. 3 ret.	10	12	1		28
12	T	Old May-Day.	10	56	2		22
13	W		11	35	3		14
14	T		morn.		4		4
15	F			5	4		51
16	S			29	5		36
17	D	5th S. after Easter. Rogation Sunday.		51	6		19
18	M	East. T. 4 ret.	1	10	7		6
19	T	Q. Charlotte born 1744. Dunstan.	1	20	7		42
20	W		1	50	8		25
21	T	Ascension-Day. Holy Thursday.	2	11	9		9
22	F	Pis. Eliz. born 1770.	2	36	9		56
23	S		3	4	10		45
24	D	Sunday after Ascension-Day.	D sets.		11		37
25	W	On morrow of Ascen. 5 ret. East. T. ends.	8	a	52		aft. 32
26	T	Augustin, A. B.	9	39	1		29
27	W	Ven. Bede.	10	23	2		26
28	T	Oxford Term ends.	10	59	3		22
29	F	K. Charles II. Birth and Return, 1660.	11	30	4		17
30	S		11	57	5		10
31	D	Whit-Sunday.	morn.		6		1

D	☉ Rises	☉ Sets	Cl. art.	☉ D. Break	☉ East	S. turn S.	Jupiter S.	Mars S.
1	4 36	7 24	3 10	2 4	6 50	8 52	5 3	10 1
6	4 27	7 33	3 41	1 50	6 55	8 34	4 47	10 1
11	4 19	7 41	3 57	1 28	7 0	8 16	4 31	10
16	4 12	7 48	3 59	1 4	7 4	7 58	4 14	10
21	4 5	7 55	3 46	0 24	7 8	7 30	3 58	9 5
26	3 58	8 2	3 20	0 0	7 12	7 20	3 47	9 5

JUNE hath XXX Days.

M ☉ Decl.
D North.

Full Moon 7th Day, 17 m. past 8 Afternoon.

Last Quarter 15th Day, at 5 m. past 7 Afternoon.

New Moon 23d Day, 5 m. past 8 Morning.

First Quarter 30th Day, 44 m. before 1 Morning.

☉ enters 25 21st Day, 1 H. 55 M Morning.

1	22°	9
6	24	44
11	23	9
16	23	23
21	23	28
26	23	22

1 M Whit-Monday. Nicomede, M.

om 21 6 52

2 T Whit-Tuesday.

o 46 7 43

3 W Ember Week.

1 10 8 34

4 T K. Geo. III. bo. 1738.

1 36 9 26

5 F Pr. Ernest A g.b. 1771. Boniface, B.M.

2 7 10 20

6 S Trinity Sunday.

2 43 11 14

7 D On Morrow of H. Trin. 1 Ret.

D rises. morn.

8 M Oxford Term begins.

8 a 47 8

9 T St. Barnabas. Corpus Christi.

9 29 1 1

10 W Trinity Term begins.

10 2 1 52

11 T 1st Sunday after Trinity.

10 29 2 41

12 F In 8 Days of H. Trin. 2 Ret.

10 52 3 27

13 S St. Alban, M.

11 12 4 10

14 D 2d Sunday after Trinity.

11 31 4 52

15 M In 15 Days of H. Tr. 3 Ret.

11 50 5 33

16 T St. John Bapt. Midsummer Day.

morn. 6 15

17 W 3d Sunday after Trinity.

10 6 58

18 T Longest Day.

33 7 43

19 F St. Peter, Ap. of Trin. 4 Ret.

59 8 30

20 S 1st Sunday after Trinity.

1 30 9 21

21 D 2d Sunday after Trinity.

2 9 10 15

22 M In 15 Days of H. Tr. 3 Ret.

2 58 11 11

23 T St. John Bapt. Midsummer Day.

D sets. aft. 9

24 W 3d Sunday after Trinity.

8 a 51 1 7

25 T Longest Day.

9 28 2 4

26 F St. Peter, Ap. of Trin. 4 Ret.

9 56 2 59

27 S 1st Sunday after Trinity.

10 21 3 52

28 D 2d Sunday after Trinity.

10 45 4 43

29 M In 15 Days of H. Tr. 3 Ret.

11 9 5 34

30 T St. John Bapt. Midsummer Day.

11 34 6 25

D	☉ Rises	☉ Sets	Cl. aft. ☉	☉ East	Saturn S.	Jupiter S.	Mars S.
1	3 52	8 8	2' 32"	No	7 16	6 m 57	3 a 21
6	3 48	8 12	1 43	real	18 6	37 3	4 9
11	3 45	8 15	0 46	Night,	19 6	17 2	47 9
16	3 43	8 17	bef. 15	but	20 5	57 2	30 9
21	3 43	8 17	1 20	Twilight.	21 5	37 2	14 9
26	3 44	8 16	2 25		20 5	17 1	56 9

J U L Y hath XXXI Days.

M D | ☉ Deel. North.

Full Moon 7th Day, 31 m. past 8 Morning.
 Last Quarter 15th Day, 21 m. past 11 Morning.
 New Moon 22d Day, 1 m. past 4 Afternoon.
 First Quarter 29th Day, 20 m. past 6 Morning.

1	23°	5
6	22	39
11	22	3
16	21	17
21	20	22
26	19	19

☉ enters ♍ 22d Day, 0 H. 44 M. Afternoon.

1	W	Trinity Terms ends.	morn.	7	18
2	T	Visitation of B. V. Mary.	6	8	9
3	F	Dog-Days begin.	37	9	2
4	S	Transf. of St. Martin.	1	18	9 56
5	D	4th Sund. aft. Trin. Old Midsum. D.	2	10	10 49
6	M		3	2	11 4
7	T	Thomas à Becket. Camb. Commencem.	D rises.	morn.	
8	W		8 a	25	29
9	T		8	50	1 16
10	F	Old St. Peter. Camb. Term ends.	9	12	2 0
11	S		9	32	2 43
12	D	5th Sunday after Trinity.	9	50	3 25
13	M	Oxford Act.	10	11	4 6
14	T		10	31	4 48
15	W	Swithun, B. Tr.	10	55	5 31
16	T		11	24	6 16
17	F		11	58	7 4
18	S	Oxford Term ends.	morn.	7	56
19	L	6th Sunday after Trinity.		42	8 51
20	M	Margaret, V. & M.	1	36	9 48
21	T		2	42	10 47
22	W	St. Mary Magdalen.	D sets.	11	46
23	T		7 a	54	aft. 44
24	F		8	22	1 39
25	S	St. James Apof.	8	48	2 33
26	D	7th Sund. aft. Tr. St. Anne. O. St. Swith.	9	11	3 26
27	M		9	37	4 18
28	T		10	6	5 11
29	W		10	38	6 4
30	T		11	17	6 57
31	F		morn.	7	50

D	☉ Rises	☉ Sets	☾ bef.	☉ D. Break	☉ East	Saturn S.	Jupiter S.	Mars S.
1	3 46	8 14	3 25		7 19	4 57	1 42	9 5
6	3 49	8 11	4 18	No	18	4 37	1 20	9 0
11	3 53	8 7	5 2	real	15	4 16	1 10	8 54
16	3 58	8 2	5 36	Night.	12	3 55	0 54	8 48
21	4 4	7 56	5 56		9 3	34	0 38	8 42
26	4 11	7 4	6 3	b 52	5 3	14	0 23	8 36

AUGUST hath XXXI Days.

M. ☉ Decl.
D. North.

Full Moon 5th Day, 27 m. past 10 Night.

5 17 0 53

Left Quarter 14 h Day, 4 m. past 2 Morning.

6 16 33

New Moon 20th Day, 18 m. past 11 Night.

11 15 16

First Quarter 27th Day, 14 m. past 3 Afternoon.

16 13 33

21 11 55

☉ enters the 22d Day, 7 H. 3 M. Afternoon.

26 10 12

1	S	Lammas-Day.	0 m 2 8 43
2	D	8th Sunday after Trinity.	0 55 9 34
3	M		1 53 10 23
4	T		2 55 11 10
5	W	Old St. James.	D. rises. 11 50
6	T	Transfiguration.	7 a 17 morn.
7	F	Prs. Amelia born 1783. Name of Jesus.	7 38 40
8	S		7 58 1 22
9	D	9th Sunday after Trinity.	8 17 2 4
10	M	St. Laurence, M.	8 38 2 41
11	T	Prs. of Brunsw. born 1737. Dog-days end.	9 0 3 24
12	W	Pr. of Wales b. 1762. Old Lammas-D.	9 28 4 13
13	T		9 59 5 0
14	F		10 40 5 49
15	S	Assumption.	11 26 6 41
16	D	10th S. aft. Tr. D. of York bo. 1763.	morn. 7 36
17	M		23 8 32
18	T		1 32 9 30
19	W		2 50 10 28
20	T		D sets. 11 25
21	F	Pr. Wm. Henry born 1765.	6 a 50 aft. 22
22	S		7 18 1 18
23	D	11th Sunday after Trinity.	7 44 2 13
24	M	St. Bartholomew, Apost.	8 12 3 7
25	T		8 43 4 1
26	W		9 22 4 56
27	T		10 7 5 51
28	F	St. Augustin, B.	10 57 6 44
29	S	St. John beheaded.	11 53 7 36
30	D	12th Sunday after Trinity.	morn. 8 26
31	M		51 9 14

☉	Rises	☉	Sets	Cl. bef. ☉	D. Break	☉	East	Saturn S.	Jupiter S.	Mars S.
1	4 20	7 40	5 52	1 24	7 0	2 m 50	0 a 5	8 m 31		
6	4 28	7 32	5 25	1 44	6 55	2 37	11 m 50	8 26		
11	4 37	7 23	4 43	2 2	50	2 10	11 35	8 21		
16	4 45	7 15	3 49	2 20	44	1 50	11 21	8 16		
21	4 54	7 6	2 41	2 35	39	1 30	11 7	8 12		
26	5 4	6 56	1 23	2 50	33	1 11	10 53	8 8		

M Dec.
D North.

1182

6	6	3
6	6	12

III	4	10
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15	4	19
16	2	23

21	0	27
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26 I S 30

5010

1	T	Giles, Ab. and C.	1m	59	10	0
2	W	London burnt 1666, O.S.	3	5	10	44
3	T		4	10	11	27
4	F	Old St. Bartholomew.	2	15	morn.	
5	S		6	2	30	10
6	D	13th Sunday after Trinity.	6	52		52
7	M	Eumarchus, B.	7	15	1	34
8	T	Nativity of B. V. Mary.	7	39	2	18
9	W		8	9	3	4
10	T		8	45	3	52
11	F		9	28	4	42
12	S		10	21	5	35
13	D	14th Sunday after Trinity.	11	25	6	29
14	M	Holy Cross.	morn.		7	25
15	T			36	8	21
16	W	Ember Week.	1	52	9	17
17	T	Lambert, B. M.	3	15	10	13
18	F		4	38	11	8
19	S		2	15	aft.	4
20	D	15th Sunday after Trinity.	6	21	1	1
21	M	St. Matthew. Evang.	6	52	1	57
22	T	K. George III. crowned 1761.	7	28	2	54
23	W		8	10	3	50
24	T		9	0	4	45
25	F		9	56	5	39
26	S	St. Cyprian, M.	10	57	6	31
27	D	16th Sunday after Trinity.	morn.		7	21
28	M			1	8	8
29	T	St. Michael. Prs. Cha. Aug. M. bo. 1766.	1	7	8	53
30	W	St. Jerom. C. P.	2	12	9	37

D	ifes	Sets	Cl. aft.	D. break	alt	Saturn S.	Jupiter S.	Mars S.
1	5 15	6 45	23"	3 7	26	0 m 48	10 m 40	...
6	5 25	6 35	2 1	21	20	0. 28	10 25	7 57
11	5 34	6 26	3 44	34	14	0 8	10 10	7 52
16	5 44	6 16	5 28	45	8	11 a 48	9 55	7 47
21	5 54	6 6	7 12	56	2	11 28	9 41	7 42
26	6	5 6	8 54	4 7	5 55	11 7	9 27	7 27

OCTOBER hath XXXI Days.

[M] ☉ Decl.
[D] South.

Full Moon 4th Day, 5 m. past 7 Morning.
Last Quarter 12th Day, 37 m. past 1 Morning.
New Moon 18 Day, at 19 m. past 4 Afternoon.
First Quarter 25th Day, 8 m. past 8 Night.

1	3° 27'
6	5 23
11	7 17
16	9 9
21	10 58
26	12 42

☉ ente 3 m 22 d Day, 11 H. 24 M. Night.

1	T	Remigius, Bp.	3 m 17	10	19
2	F	Old St. Matthew.	4 21	11	0
3	S		5 25	11	42
4	D	17th Sunday after Trinity.	D rises.	morn.	
5	M		5 a 53		26
6	T	Faith, V. M.	6 22	1	11
7	W		6 55	1	58
8	T		7 30	2	47
9	F	St. Denys, B. M.	8 24	3	38
10	S	Oxf. and Cam. T. be. O. Michaelm. Day.	9 21	4	31
11	D	18th Sunday after Trin.	10 29	5	25
12	M		11 40	6	20
13	T	Transl. of K. Edw. Conf.	morn.	7	14
14	W		59	8	8
15	T		2 19	9	2
16	F		3 40	9	56
17	S	Etheldred, V.	5 2	10	50
18	D	19th Sunday after Trinity. St. Luke.	D sets.	11	46
19	M		5 a 29	aft.	44
20	T		6 10	1	42
21	W		6 56	2	39
22	T		7 51	3	35
23	F		8 52	4	29
24	S		9 56	5	20
25	D	20th S. afr. Tr. K. Geo. III. Accel.	11 0	6	8
26	M	K. Geo. III. P. oclm. 1760.	morn.	6	54
27	T		6	7	38
28	W	St. Simon and St. Jude.	1 2	8	20
29	T		2 15	9	2
30	F		3 20	9	44
31	S		4 25	10	27

D	☉ Rises	☉ Sets	Cl. aft. ☉	D. Break	☉ East	Saturn S.	Jupiter S.	Mars S.
1	6 14	5 46	10 32	4 18	5 49	10 a 48	9 m 12	7 m 34
6	6 24	5 36	12 2	2 2	43	10 29	8 57	7 26
11	6 33	5 27	13 21	39	37	10 9	8 42	7 18
16	6 43	5 17	14 28	49	31	9 49	8 27	7 10
21	6 53	5 7	15 20	59	25	9 29	8 11	7 2
26	7 2	4 58	15 55	5 8	19	9 9	7 55	6 54

NOVEMBER hath XXX Days.

M. Decl.
D. South.

Full Moon 3d Day, 38 m. before 1 Morning.
Left Quarter 10th Day, 30 m. past 10 Morning.
New Moon 17th Day, 29 m. past 3 Morning.
First Quarter 24th Day, 42 m. past 3 Afternoon.

1	14	41
6	16	13
11	17	38
16	18	56
21	20	6
26	21	6

☉ enters ♌ 21st Day, 7 H. 37 M. Afternoon.

1	D	21st Sunday after Trinity. All Saints.	5	30	11	a	12
2	M	Pr. Edw. b. 1767. Omnium Defunctorum.	D	rises.	11		59
3	T	Prs. Sophia b. 1777. On Mor. of All	5	a	1	morn.	
4	W	[Souls & Ret.	5	38			48
5	T	Powder Plot, 1605.	6	25	1		39
6	F	Leonard. Michaelmas Term begins.	7	19	2		31
7	S	D. of Cumberland b. 1745.	8	21	3		24
8	D	22d Su. aft. Tr. Prs. Aug. Sophia b. 1768.	9	32	4		17
9	M	Lord Mayor's Day at London.	10	46	5		20
10	T			morn.	6		3
11	W	St. Martin, B.		3	6		55
12	T	On Mor. of St. Mart. 2 Ret. Camb. T.	1	21	7		47
13	F	Britius, B. [div.	2	41	8		39
14	S		4	1	9		32
15	D	23d Sunday aft Trin. Machutus, B.	5	22	10		27
16	M		6	40	11		24
17	T	Hugh, Bp. of Lincoln.	D	sets.	aft.		21
18	W	In 8 Days of St. Mart. 3 Ret.	5	a	34	1	18
19	T		6	33	2		12
20	F	Edmund K. & Mart.	7	37	3		8
21	S		8	42	3		51
22	D	24th Su. aft. Tr. Cæcilia. Old St. Martin.	9	49	4		41
23	M	St. Clement, B. M.	10	55	5		31
24	T			morn.	6		1
25	W	D. of Glouc. b. 1743: Cath. In 15 days		0	6		5
26	T	[of St. Mart. 4 Ret.	1	4	7		31
27	F		2	7	8		11
28	S	Michaelmas Term ends.	3	11	9		
29	D	Advent Sunday.	4	16	9		4
30	M	St. Andrew, Apost.	5	21	10		3

D	☉ Rises	☉ Sets	☉ Cl. aft.	☉ D. Break	☉ East	Saturn S.	Jupiter S.	Mars		
1	7 13	4	47 16 13	5	17	5	12	8 a 45	7 m 36	6m 4
6	22		38 16 7		24		7	8 25	7 18	6
11	30		30 15 39		32		1	8 5	6 59	6
16	38		22 14 49		37	4	57	7 45	6 40	6
21	45		15 13 39		43		52	7 24	6 21	5
26	52		8 12 9		49		49	7 2	6 2	5

DECEMBER hath XXXI Days. M^o D^y South.

Full Moon 20 Day, 39 m. past 4 Afternoon.	21 21 50
Last Quarter 9th Day, 17 m. past 6 Afternoon.	6 22 36
New Moon 16th Day, 43 m. past 4 Afternoon.	4 23 5
First Quarter 24th Day, 11 m. past 1 Afternoon.	16 23 22
	21 23 27
☉ enters 21st Day, 7 H. 59 M. Morning.	26 23 21

1 F	6m 20m 25
2 W	Drists. morn.
3 T	5 2 6 17
4 F	6 9 1 11
5 S	7 16 2 6
6 D	8 29 3 0
7 M	9 44 3 53
8 T	10 1 4 44
9 W	morn. 5 35
10 T	18 6 25
11 F	1 37 7 17
12 S	2 53 8 8
13 D	4 11 9 2
14 M	5 24 9 57
15 T	6 33 10 53
16 W	7 sets. 11 50
17 T	5 a 0 aft 44
18 F	6 12 1 36
19 S	7 20 2 25
20 D	8 26 3 11
21 M	9 32 3 55
22 T	10 36 4 37
23 W	11 39 5 18
24 T	morn. 6 0
25 F	1 45 6 42
26 S	1 45 7 26
27 D	2 51 8 12
28 M	3 55 9 1
29 T	5 0 9 52
30 W	5 56 10 46
31 T	6 49 11 42

D	☉ Rites	☉ Sets	☉ Cl. arr.	☉ D. Break	☉ East	Saturn S.	Jup ter S.	Mars S.
1	7 57	4 3	10 22	5 54	4 45	6 a 40	5 m 43	5 m 26
6	8 2	3 58	8 19	56	43	6 19	5 21	5 8
11	8 5	3 55	6 3	58	41	5 58	4 59	4 50
16	8 7	3 53	3 38	6 0	40	5 37	4 37	4 32
21	8 8	3 52	1 8	1	39	5 16	4 15	4 1
26	8 7	3 51	1 21	0	40	4 55	3 53	3 58

ANSWERS to the QUESTIONS Critical and Philosophical.

LXXVI. Mr. *J. Burrow*, Mr. *H. Mellanby*, Mr. *J. Needham*, Mr. *D. Roberts*, *Virgilius*, Mr. *J. Ward*, and Mr. *J. Winterbottom*, gave answers to the following effect, viz.

That eating swine's flesh hinders transpiration, and thence causes cutaneous and scrofulous disorders, especially in hot climates, where it must consequently be unwholesome food.

And Mr. *J. Cairus*, Mr. *J. Jackson*, Mr. *W. King*, Mr. *T. Peat*, and Mr. *J. Walton*, have also given ingenious answers.

LXXVII. Answered by Mr. *Jackson* of *Hutton-Rudby-School*.

In Dan. v. 8. it is said, "They could not read the writing, nor make known unto the king the interpretation thereof." But in the Latin translation of *Junius* and *Tremellius*, it is "Non possent scripturam illam legere, et interpretationem notam facere regi." They could not read the writing, and make known unto the king the interpretation thereof; i. e. though they possibly could read the words, yet they could not explain the meaning.

And this is also agreeable to the answer of the learned *Philocriticus*. We were also favoured with answers from Messrs *Burrow*, *Cairus*, *Cavill*, *Needham*, *Peat*, *Roberts*, *Rowe*, *Walton*, *Ward*, and *Winterbottom*.

LXXVIII. By Mr. *J. Burrow*, of *Bolton-Field*.

Certainly the Holy Ghost inspired the sacred penman to write this verse in Chaldee, that the Jews, going to Babylon, might reply to the Chaldeans in their own tongue, when they solicited them to worship their idols. Cursed be your gods, for they neither made heaven nor earth.

And to the same purport are the answers of Messrs. *Cairus*, *Cavill*, *Jackson*, *Mellanby*, *King*, *Needham*, *Peat*, *Rowe*, *Walton*, *Ward*, and *Winterbottom*.

LXXIX. By Mr. *J. Ward*, the proposer.

When St. Paul was complaining of the weight and bitterness of sin, very probably he compared it (by the allusion in question) to the hideous and execrable mode of punishment, mentioned in the 8th book of the *Æneid*, as practised by *Mezentius*, who punished his subjects by binding a dead to a living body till it caused the transgressor's death.

Messrs. *Mellanby*, *Needham*, and *Winterbottom* also suppose the Apostle to allude to this custom. But Mr. *J. Walton* supposes him to mean to say, "From the power of those sinful passions, which are continually frustrating all my pious resolutions, and subjecting me to the most excruciating sorrow and remorse, even worse than death itself." And in this sense the words are taken by Messrs. *Cairus*, *Cavill*, *Jackson*, *Burrow*, *Lowry*, *Peat*, *Rowe*, and *Virgilius*.

LXXX. By Mr. *J. Winterbottom* of *Faithworth School*.

Light is an intermediate fluid betwixt fire and air, distinct from either; for, were light and fire the same thing, the heat would always increase in proportion to the light; the contrary to which is proved by experiment. For, when the Moon's rays are collected by a lens till their focus point is 500 times more bright than the full moon, yet this great degree of brightness does not cause the least motion in the liquor of the thermometer, which will be sensibly moved by the approach of the hand; and by the German stove we experience great heat, without the least

least light; but light may be emitted by percussion *in vacuo*, by attrition, and by putrefaction. Is it not then probable, that light is the fluid the Almighty hath made choice of to put in and accelerate the motion of the fire?

And that it is the *primum mobile* of creation, appears from the record of Moses, as being created the first day, &c. It is a vulgar error to imagine, that the Sun and Stars are the causes of all light; they being only the greatest luminaries, and might the communicating agent of fire; and thus, before the creation of them, it appears very possible, that there might be light, and the Mosical account literally true.

And to the same purpose are the answers of Messrs. Burrow, Glendenning, Jackson, Mellanby, and Virgilus. Mr. Ward gives the answer from the Universal Hist. Vol. xvii. agreeing with those by Messrs. Cairus, Lowry, and Needham. Mr. J. Walton also gave an ingenious answer.

LXXXI. By Mrs. Tho. Peat, of Barnsley

Although the people of the land made Jehohaz king, in preference to his brother, yet that lays no foundation for inferring that he was the first-born. By the account we have it appears, that Jehoiakim was the elder, though he came last to the throne; and I know of no text that speaks to the contrary.

And thus the answer is given by Messrs. Burrow, Cairus, Cavill, Crofier, Fidler, Harrison, Jackson, Mellanby, Needham, Rowe, Virgilus, Walton, Ward, and Winterbottom.

LXXXII. Answered by Mr. Alex. Rowe.

The warm fluid particles exhaled from the lungs make the room warmer than the external air, and the fiery particles making their way through the glass, in endeavouring to restore the equilibrium of heat, leave the aqueous ones, with which they were incorporated, behind upon the surface of the glass. And thus it is answered by Messrs. Burrow, Cairus, Cockrel, Cook, Harrison, Fidler, Jackson, Mellanby, Needham, Roberts, Swift, Virgilus, Ward, and Winterbottom.

LXXXIII. Answered by Mr. J. Walton, of Allendale.

If you hold the chain of a watch in your teeth, and stop your ears, the sound, which is convey'd along the bones to the tympanum, is heard very distinctly. Now, the disagreeable sensation occasioned by the sharpening of a saw, &c. causes such a tremulous motion upon the membrane, that the contiguous bones are affected with it; and so conveys the uneasy sensation to the nerves of the teeth; in such a manner as to cause a sympathetic affection. Mr. Burrow says, it is affirmed by anatomists, that the nerve of the tooth has a communication with the air, by a small pore opening at the top of the tooth in some persons in their youth; but when the prime of life is past, the pore closes, the tooth becomes more solid, and less affected by the sounds in question. Mr. Ward says, the teeth are sonorous, and therefore affected by grating wounds that are in unison with them. And that chewing purslain, sorrel, almonds, walnuts, or burnt bread, is a preventative against this complaint. And in much the same manner it is answered by Mr. J. Jackson of Hutton-Ruddy, and Messrs. Cairus, Needham from Clare's Fluids, Rowe, Fidler, and Swift.

LXXXIV.

LXXXIV. Answered by Mr. Jackson, of Hutton-Rudby-School.

Flame proceeding from either unctuous or spirituous matter is of an electric nature, being more light and subtle than the common culinary flame; and water being a well-known conductor, it immediately flies up the stream of water as you pour it in, which causes the flame to be more rapid.

N. B. As no flame can be sustained without air, people happening to set spirituous or unctuous matter on fire would do well to throw a damp cloth over the vessel containing it, for this will instantly extinguish the flame.

Messrs. Burrow, Cairns, Harrison, Mellanby, Needham, Roberts, Rowe, Walton, Ward, and Winterbottom, also give like answers.

LXXXV. Answered by Mr. H Mellanby, of Stockton.

Without sand, the iron becomes ductile on'y at and near its surface, whilst the heart remains so obdurate, especially in a thick piece, that it is not easily drawn out. But the utility of the sand is most conspicuous when a welding-heat is required; for here the metal must be reduced almost to a fluid, which could not be effected at the forge without sand. Mr. John Jacka says, a pound of iron being worked into nails, rolling the rod in sand, will make rather more than a pound of nails; but otherwise scarcely three-fourths of one. And Messrs. Burrow, Cairns, Cock, Croker, Fidler, Harrison, Jackson, Lctory, Needham, Roberts, Rowe, Walton, Ward, and Winterbottom, gave answers equally satisfactory.

LXXXVI. Answered by Mr. Wm. Harrison, of Wicksforth.

Sulphur is composed of vitriolic acid and phlogiston; and vitriolic acid is a well known dissolving *menstruum* for iron: it is therefore no wonder that hot iron should be wasted by the application of the sulphur.

Mr. Mellanby the proposer says, by the help of this operation wood is stained black. Take an old file, or other steel, and reduce as *per question*, which will run off in drops and calcine; and these drops must be received into water, to prevent their adhesion, that they may the more easily be pulverized, which is the next thing to be done; then dilute this with vinegar, and the liquid you now have will turn jet-black wood that has previously been stained with logwood-water. When dry, lay on a little black wax, and rub it well with a flannel cloth.

Ingenious answers were also given by Messrs. Burrow, Cairns, Cock, Fidler, Jackson, Needham, Rowe, Swift, Walton, Ward, and Winterbottom.

ÆNIGMATOLOGY.

ANSWERS to the last year's ÆNIGMAS.

1. An illegitimate Child.
2. Eve.
3. A Licence.
4. A Jaw-bone.
5. Sleep.
6. A Hat.

7. An Apron.
8. A Bottle.
9. A balance.
10. Hemp.
11. Wax.
12. Hadleys Quadrant.

13. A Wing. 15. Chastity.
 14. A Player. 16. The High Road, or Turnpike,
 1. Robin. Bagpipe. 2. Ringwood. 3. Wedlock. 4. Sunday. 5. Firelock.
 6. Jackson.

GENERAL ANSWERS.

1. Stanzas Elegiac: To the memory of Mr. Peter Freeman, late of
 Daventry, Northamptonshire. By Mr. B. WAST.

*Where is his Gibe now? his Jests? his flashes of merriment, that were
 wont to set the Table of a Room?* Shakespeare.

- The spurious bard, impel'd by love of praise, 1.
 To make the world believe him great and wise, 2.
 Each licence takes; each little art assays, 3.
 And meanly stoops in hopes to fame to rise.
 But since to death's insatiate jaws a prey,
 Dear Freeman sleeps in Earth's cold dreary womb; 4.
 To his lov'd mem'ry, M. W., a tribute pay, 5.
 And give his worth to live beyond the tomb.
 Woe, tho' the decent apron might offend 6.
 Some haughty soph, of classic knowledge vain;
 Bright Genius in the tradesman hail'd a friend,
 And smiling Humour own'd him of her train.
 'Twas his the peal of nature to provoke
 The penile vain withings courted to command,
 What time invol'd in clouds of curling smoke,
 Around the hearth sat the cheerful band; 8.
 In graver hours he gave the sapient few
 Proofs of true taste and sentiments refin'd;
 From various authors he sage maxims drew,
 For much he read, and much retain'd in mind.
 But, O immortal Pope! thy epithets,
 Fraught with the charms and energy of song,
 Was deem'd the choicest of the mental store;
 And flow'd with moving pathos from his tongue.
 "Snatch from his hand the balance and the rod," 9.
 'Twas thine to pen, and Freeman's to recite,
 Who liv'd pleas'd, "the noblest work of God,"
 By all who thought, great bard! thy judgment right.
 Like thine, this wit its lawful objects knew;
 To few in anger were its shafts apply'd,
 Save those to whom the homely wrath was due, 10.
 And scribblers warring insolent with pride. 11.
 For true politeness, like a quadrant, gave 12.
 That wit's proper latitude to know,
 And who but pedant, hypocrite, and knave,
 In generous Freeman found a ferocious foe?
 If heily such his indignation mov'd,
 His honest lash if vice and folly fear'd;
 He priz'd true merit, men of genius lov'd,
 And, they no more, their memorials rever'd.

• An honest man.

Witness, O Twickenham! thy conscious shades,
Where erst his *voice* rung the epic lyre;
And would in strains sublime th' *Agon* Maids,
While sportive Fancy giv'd her wing of fire.
Those sacred haunts, by veneration let,
With secret rapture *freeman* would explore,
The paths his *bard* had trod erewhile to tread,
And *where* where *Hope* was *was* to *most* before,
But brighter *Scene* smiling in his view,
Imposse and *chance* he yields his breath,
Bids a vain world a long — a last adieu,
And finds the *quint* happiness in death.

2. The Reverie. By Mr. J. BRADBERRY, of Terling.

<p>Daughters of <i>Eve</i>, ye blooming fair, To you my strains belong; Last year I sung a shepherd's care, His grief and all his wrong; You'll recollect the woful tale, How his Maria wed; But ah! not so, might I prevail, Her <i>name</i> should not be spread. But Justice who with even scale Each act and <i>error</i> tries, And Truth forbid to hide the tale, On Fame's swift wing it flies. Indeed the licence was prepar'd, The parchment seal'd and sign'd, Hats, a <i>prose</i> trimm'd, <i>stretts</i> ready air'd, When Strephon chang'd his mind. You ask me why? that question, In charity forbear, Suffice it only now to say, In turn she tastes despair.</p>	<p>No peace heraching bosom knows, Dire dreams and <i>rest</i> distress, She seeks in vain for calm repose, That she might goe to weep. The hope's <i>deceit</i> she rear, Some latent peace to find, The <i>jealous</i> of <i>guilt</i> her conscience And wound anew her mind. No cordials from the <i>heart</i> now Can cheering thoughts inspire, Grief sends her forth, <i>care</i> leads her To die her sole desire. Nay, once, <i>the</i> <i>fatal</i> <i>rope</i> In agony she <i>leaps</i>, So lost to joy, so <i>stray</i> <i>hope</i>, So mad to be <i>relat</i>'d. But, ah! unhappy maid, forbear So wrong a <i>road</i> to take; To God apply in fervent pray'r, For the Redeemer's sake.</p>
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3. A contemplation. By Mrs. J. BURROUGHS, of Bokenfield.

<p>The man whose constitution's strong, And free from vexing cares his mind, As changing seasons wing along, Can in them all new pleasures find, Nor slander's <i>temple</i> nor <i>fortune</i>'s frown, Nor licens'd <i>bastard</i> at his door, Nor fear of <i>hemp</i> at his <i>jaw</i> <i>door</i>, Disturb his sleep at midnight hour, He, when the mornings slowest rise, Can balance well the night and day, In conversation with the wife, Or pipe and bottle with the gay, The silver moon, and stars to <i>fair</i>, With telescope and quadrant find,</p>	<p>Add feel the glorious <i>scene</i> prepare For nobler thoughts the enlarged mind. With hand and <i>bar</i> and <i>apron</i> clean, Or heart and conscience free from Agreeably can view the <i>strains</i> [load Of life, in every <i>toil</i> <i>road</i>. Not only in his youthful prime, And while his powers continue firm; But when the <i>feels</i> the <i>effect</i> of time, And age prepares him for the worm, Faithful <i>boy</i> <i>new</i> <i>red</i> <i>glow</i>, From whence that <i>fun</i> will soon appear, <i>above</i>, Whose smiles wake endless joys Will all his damps and darkness clear.</p>
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4. A Hymn to Friendship. By Mr. JACKSON, of Hutton-Rudby.

Come, gentle friendship, wave thy *wings*
 Around my low but peaceful cot;
 Waft *selfhood* far, with all its *strings*,
 And let contentment be my lot.
 Thou kind composer of all strife,
 Give *rest*, pour blessings on my head,
 Propitious, give a loving *wife*,
 The *licens'd* partner of my bed;
 The lov'd mem'ry of each *charm*,
 When griding *jaw-bone's* no more
 heard,

Nor *apron* seen, may fear disarm,
 And show the road by comfort
 I hear'd.
 Thy balm from the *bottle* pour,
 And weigh thy sweetness in the *scales*,
 Assist the seaman in that hour
 When *ropes* and *helm* and *quadrant*
 fail.
 And when, with retrospective view,
 The *actor* thinks on actions past;
 Set to thy *feet* that I was true,
 Then *charity* shall ever last.

5. Against Lying. By Mr. G. BRENTNALL.

Shameful as *Eve*! the lying tongue
 That takes a *licence* to do wrong!
 Than ope their *jaws* in such a case,
 They'd better be of *steeping* race:
Hats, *Aprons*, *Bottles*, jewels bright
 If theirs, when weigh'd, they'd be
 too light.

They well deserve a *coaxen rope*,
 As *Hodley* did a *telescope*:
 They cannot *twine* their way to bliss;
 Which wicked *actors* needs must
 miss.
 Lye! repent and be forgiven,
 For *charity's* the road to heaven.

6. The Cobbler. By Mr. T. NIELD, of Hawarden.

A base-born cobbler once there was,
 Who'd fain for man of spirit pass;
 Without his *bottle* wont to swear
 He wou'd not work a single hair,
 And *wing'd* away his tools all flew,
Wax, *bump*, nay *bat* and *apron* too.
 Then to the *quadrant* he'd repair,
 To whet his wit and drown his care
 And warm'd with liquor he'd
 relate

Or like an *actor* on the stage,
 Hold stiff his *jaws* as froze with age;
 He'd *balance* *straws* he'd mimic
sleep [*creep*;
 Then leap, then on his hands he'd
 But now, alas! his pranks are o'er,
 In *charity* we'll say no more:
 On Sunday eve, at close of day;
 His friends they bore him hence
 away.

The *licens'd* follies of the state;

7. The Wedding. By Mr. J. MOORE.

As *Jackson* at eve walk'd along the *highway*, 6 Reb. 2. 16.
 Not with *firelock*, but *b. gipes* compleat, 5. Reb. 1. Reb..
 He met *Charity* *Jaw-bone*, the queen of May day, 15. 4.
 In straw *bat*, *bumpin* *apron* yet rear. 6 10. 7..
 He said, pretty maiden, pray listen to me,
 You to *sleep* with in *wedlock* I crave; 3. Reb. 5.
 She reply'd, Sir, no *licens'd* bag-piper's I'll be, 3.
 Who's to *bottles* and *glasses* a slave. 8. 12..
 You mistake me, dear maiden, I'm not of that sect,
 To *tippling* or *lying* inclin'd, 2.
 First weigh in the *balance* before you reject 9.
 A good offer;—be modest and kind.
 In amorous chat flew the *wing'd* urchins dart, 13.
 At *Rigwood* he gained the fair; 2. Reb.
 And *Hymer* last Sunday well *afford* his part, 4 Reb. 14.
 By *stealing* the wish of the pair. 17.

8. The last Day. By Mr. J. STOKES jun. Terling.

Behold the great and awful day at hand, [must stand!	First to the right he turns his smiling face [sons of grace;
When all mankind before their judge With sealed liberty from the sov'reign Lord, [his word.	And hails, with words of love, those Come, blessed souls! dwell with the God you love,
To raise the world from death attend See no word cherubs hasting thro' the skies, [rise;	Your ways of city I now approve. But on the left, go't, flame , and sad despair, [sentence hear:
To summon all the seed of Eve to All those who sleep in death the sound shall hear,	Will reign, while they their woful Down to th' infernal pit they're drove accurst, [parching thirst;
Before the great tribunal all appear. The glorious judge ascends his splen- did throne, [makes known;	Their burning jaws gnashing for Their stage is fix'd; nor can they ever take
His pow'r and justice to the world In equal balance every atom weighs, And ev'ry line and race of men surveys;	A single drop, who battles once did waste.
His eye, without a glass; sees far and wide, [him hide.	Lord, grant I may for this great da prepare,
Nor can rocks or mountains from Stead of a bar, his head's with glory crown'd [found;	That then thy love and favour I may share!
And vengeance, as an open ; girds him	May dwell with thee in bliss thro endless days;
	And join with saints and angels in thy praise!

9. The vision of Heber. By Mr. T. BAKER, Nuneaton.

In thought remov'd from this delu- sive seat, [soar'd	Sedate, yet chearful, like the beaver , kind [race;
On heav'nly wings the gentle Heber To that blest kingdom void of all deceit, [afford;	And sociable, he seeks the dutious And ready, to strengthen and improve his mind, [works of grace.
Where love and truth real happiness With jovous eager look he wish'd to find [hence;	The books of knowledge, and the Sometimes when bees are in their waxen cells, [shine,
His dearest friends, of late departed But low astonish'd was his tender min'! [cencel	And countless stars in boundless ether He takes his glass, and joy'd with wonder tells [all divine.
Sure he was dark to heav'nly innu- From him they flew, yet lost de mea- nor kept [perceive	The Pow'r that made them must be How just the thought! like Heber, wish to be [might,
Always so near him he could them He trembled, sigh'd, and in his s.irit wopt, [of Eye	Secure or liens'd , not by earthy But by the Almighty sov'reign Deity, [delight,
Conscious he'd sinn'd like all the sons Yet struck with awe at the celestial scene, [him enrice,	He sleeps in peace and wakens with How wise are they who, like stay'd Heber, thus [produces mirth
Nor wealth nor worldly charms could To walk the devious road where he'd been, [of vice,	Th' intermediate state how! Due cheer But see to what extremes some mor- tals run! [of death.
Led by th'unthinking careless slaves	In drunkenness they meet the j av -

May all, who have the vision well survey'd, [Justin'd,
To love and heavenly virtue be free from the balser's ignominious
That, when their good and ill are justice shall crown with bliss the
fairly weigh'd, [your find souls of men, [their fame,
They may the balance in their sa- And hear a glad angel's hymn set forth

10. On Advice. By Mrs. ASIGAIL WINTERS OF TROMA

Man, selfish man, to vanity resign'd, Let Hymen's pledge a certain token
Folly not reason rule: his fickle prove
mind; [choice, Of hearts cemented by the fast of love.
Wisdom in vain directs his wandering Shall soul, like trees, just grow as
Each passion turns him with en- they're inclin'd [mind.
chanting voice. [they, The thought is hateful to a pious
But ah! how blessed they, and only How needful then appear the ge-
Who reason's voice and nature's laws nial fire [desire,
obey! [confin'd, Of sweet advice that checks the lewd
Who within bounds their appetites And by the use of reason leads to
Nor drink too deep of pleasure's fame, [from flames,
foamy wine! [ways attain'd, And thus the spotless virgin saves
Gratified or wealth, when by just Who from the heights of innocence
Is but a partial and deceitful friend. thrown down [sighing groan.
Those flames of avarice make the Like Eve's deceit'd, like Sampson,
crown secure, [ne'er endure, The glass and bottle call'd to strow
Give pain which agon'd peasants the sense, [sence.
Not thus my Muse shall soar upon Instead of healing, rankles the
the wings, [praises sing, More than the maids the men of
And scale empyrean heights, but guilt partake, [awake;
For rural blessings, such a state bath Whose virtue sleeps but business is
giv'n [heav'n. At revel routs and bagnios oft seen,
Power so, better or, need in hopes of His sundry actions wicked are and
Such licence join'd to such benignant mean. [his jokes,
pow'r, [hour; In vain he drinks his glass and cracks
Call for the duties of each fleeting Whole rule of right is, injure other
Then, someth, learn as well as man folks; [many find,
your more; But know and tell in Jackson's tale
Their plous duties wedded to your That bliss alone flows from a virtu-
state; ous mind.

ANSWERS to the PRIZE ENIGMA. REBUSES, &c.

1. The Right Way. By THE HERMIT.

Ye thoughtless youths! who, urg'd The monster vice in pleasure's mass
by warm desire, [to run, attends,
Falls pleasure's giddy maze attempt With antic gestures and alluring wiles,
Vainly haste from her smooth slippery While life's frail tenure holds, let
ways retire, [tion shun. prudence reign; [talents giv'n
Curb wild fire passion, and destruc- True! pleasure seek, improve the
tive the to folly ever bends, By virtuous deeds the wish'd-for prize
To jolly's temple with discourse you'll gain; [heav'n.
vague, The paths of virtue are the paths to

2. The

1. The Chimney Sweeper. By Mr. J. BUNSWAN.

See the poor Chimney Sweeper in high road or street,
Nor a hat to his head, or a shoe to his feet;
Or any thing round him but rags;
He's anxious to earn him a morsel of bread:
While rich drons wear soft clothing are daintily fed,
And their pelf lies and rusts in their bags.

2. The answer. By Mr. J. BUNSWAN of Boltonfield.

Both early and late, I puzzled my pate,
What this abstract enigma could be;
Nor could I fit stone till at the toll-gate,
The Turnpike-man ask'd for his fee.

3. To Miss Mary Fisher. By Mr. G. BARNETT.

My dear Miss Fisher, words can
ne'er express, [happiness]
A thousandth part of Heaven's high
Firm with the hope so blissful, so
divine, [blissful]
In your christian virtue may you

This is the road to heaven, not
things below [empty show]
Hold what's substantial; mind no
Eternal bliss will be your portion
then, [Amen.
In joy and praise for evermore.

4. An Address on Mr. C. WILKINSON, late of Nottingham. By W. GILLES.

Conclude, ye Gents, who grace this
evening page,
With me for him whom death's
snatch'd off this stage,
Ingenuous works of his appear no
more, [deplorable.
See all the friends of truth his loss
Keen was his judgment and his rea-
son clear,

In him each social virtue did appear:
No abstract matters but he knew
the way,
So great his learning, to bring forth
to day.
Of his real worth no bard than I
knew more;
None more sincerely can his loss
deplorable.

5. The Replies answered by Mr. T. BAXTER. On an advertisement of
a book of astrology. In which, says the wonderful fortune-teller, I
foretold that the fleet would be victorious on the glorious 29th of
July. It seems he forgot to tell us, both the Admirals would be tried
for cowardice.

By sciences o cult, says Dr. GREGG,
All that will happen in this life is
seen.
Then tell me, learned Doctor sure
you can,
At a wink detect or a single man?
Am I an old bag-piper of renown,
Or shall my teacher know at King-
s-cross town?

Or did I bear the French in that
fight, [was right?
When both victorious were, and you
The French *Te Deum* sung because
they won, [they run.
And we rejoice'd aloud, because
says Jackson, that was strange,
but Doctor, look your book,
You must tell these, — before I buy

6. A resolution. By Mr. JACKSON, of Hutton-Ruddy.

The bag-piper may drone, till Saw-
ney's undone, [a jot?
At Kingwood's well, who cares
Or lovers may join their two hearts

in one, [lot.
Since wedlock they wish for their
My time I'll employ, and more
pleasure enjoy, Google

Among my young flock, in the ~~Norfolk we need~~, at peace we're
 school, ~~indeed,~~
 On Sunday's advice, and teach to Nor evil to any intent, I'll we do,
 be wise While ~~namesakes~~ and pursue good
 For this is the ultimate rule. We happy shall be in the end.

8. 1st Sunday in Advent, the Collect, in verse. Mr. J. RUSHER.

Lord, we beseech thee, give us grace,	That in the great and awful day,
That we may cast away	When he shall come again,
The works of darkness, and embrace	Array'd in glorious majesty
The gospel light to-day ;	To judge the sons of men ;
Now in the time of life, when we	We may to life immortal rise,
Believe thy blessed Son	And join the heav'nly host,
Came down in great humility	Thro' him who reigns above the
To put our nature on ;	skies
	With Thee and Holy Ghost.

9. 2nd. By the same Gentleman.

Blessed Lord, who hast caus'd holy scriptures of truth,
 To be written as precepts for age and for youth,
 Grant that we may so hear, read, mark, learn, and digest,
 Their contents, and so treasure them up in our breast,
 That by patience and comfort deriv'd from thy word,
 We may perfect our hope in Christ Jesus our Lord.

10. 3d Sunday. By the same.

O Lord Jesu Christ! who, preceding thy birth,
 Didst send a glad messenger to us on earth,
 To make ready thy way in a wild barren land,
 By proclaiming the kingdom of heaven at hand :
 Grant, that those, who now act as thy ministers, may
 So likewise prepare and make ready thy way,
 By turning the heart from its favourite lust,
 And conducting the feet in the paths of the just ;
 That when thou shalt come to take judgment around,
 We may an acceptable people be found ;
 Who livest and reignest our Saviour and friend,
 With Father and Spirit, one God without end.

New ENIGMAS to be answered next YEAR.

1. ENIGMA 466. By Mr. G. BRETNALL.

Dia in page ne'er brought to light	Him, often very good and kind.
The offspring of a nobler knight,	Recorded long in ancient story
As such he is, must I be squire ;	Moses and Aaron knew his glory.
While he is flourishing, I'm higher,	The patient Job his name holds forth
He's fell'n, I'm to conquest decreed,	And to his friends proclaims his
Still him for valor few exceed.	worth ;
He high and low bows down like	While Scripture never speaks of me,
slaves. [graves,	But that none more despis'd can be.
And sends by hundreds to their	I'm beat and trod to dust again
And yet the poor and helpless find	By honest harmless sons of men.

ÆNIGMA 467, by Mr. W. SWIFT, of SLOW.

In darkness I my lustre show,
By that you'll find my name;
Tho' I've my lodging very low,
I'm mounted up to fame.

The truest, purest gems we find
Illustrious in night;
And I, tho' on the ground restin'd,
Seem as a star of light.

3. ÆNIGMA 468, by Mr. WM. CRANE, of QUADRING.

To constitute my frame
Both flesh and blood I claim;
And ere complete I'm made
A man must lend his aid;
And then assign the cause
To the Almighty's laws;
In infancy you grew,
But such I never knew;
Yet you will own, I'm sure,
When grown to years mature,
Women's good names to steal,
Such acts I ne'er conceal;
The tidings soon are known
Abroad throughout the town:
When on this stage of life,
My lot's to take a wife.

The cross fates so contrive,
I cannot her survive,
Tho' I am still alive.
Honour I'm known to give,
In turn I none receive;
But in requital yield,
Nay often am compell'd
For peace to sue and crave,
Tho' sometimes can't it have;
Thus am I deem'd a slave.
Tho' virtue's guiding star
Direct my steps whilst here,
I have no right to prove
The joys of realms above;
Nay, it is past a doubt,
I shall be thence shut out.

4. ÆNIGMA 469, by Mr. J. MOORE.

Where Sylvan fawns and dryades
rove,

And gentle Zephyrs fan the grove;
Coverts, where owls pre' aging stray,
And philomel pours forth her lay;
I had my origin in part,

Yet am indebted to man's art.
Finish'd, in public I appear
Naked, or gold and silver wear.

Whennight her sable curtain's found,
And Somnus shakes his poppies
round,

Till orient Sol peeps forth I stand,
Your humble servant at command.

In James's park I have been seen
Attend our gracious King and
Queen;

With beggars craving at your door
Your kind compassion to the poor;
The belles and beaux I oft befriend,
For aid my kind assistance lend.

Fly, rovers, steadiness pursue,
And wonders I can bring to view;
You at my nod the hour may know,
The height of towers to you I shew.

But hush, enough, I write too
clear,

So wait your answer till next year.

5. ÆNIGMA 470, by Mr. T. BRADBERRY.

On you, ye Gents, on you, ye fair,
We often wait, a faithful pair;

Twin-born; also alike in hue,
In make, in shape, and goodness too.

Behold your blooming virgin fair
Agrees to end her shepherd's care;

Array'd in white, on her we wait,
Attend her to the altar gate;

But when the priest begins to pray
We soon are order'd off, away;

And when the solemn knot is ty'd,
Again embrace the lovely bride;

Or sure it would be very hard,
Since we of beauty are the guard;
Lo, rigid winter's chilling storm
On us bestows a rougher form.

Tho' struge in make, stranger our
food,

Nails, bones and flesh, nay stream-
And with such monstrous rav'nish
cur'd,

So full of food we often burst.
We then are out of savour grown,

To fate consign'd, to ruin thrown.

6. *ÆNIGM 471*, answering last Year's, by Mr. T. PAAR.

In days of yore, ere *Eve* an *apron*
 fought, [spoke as he thought,
 When truth prevail'd and man
 When no *seducer* hebbred cunning
 arts, [human hearts,
 With golden *wings*, had play'd on
 Nor licence giv'n for nimble tongues
 and *jaws* [cause;
 To bite, and venom spit, without a
 I was unknown. Curs'd Cain first
 gave me birth; [the earth.
 My baneful genius soon spread o'er
 Judas, whom *hempen cord* suspended
 high, [did lie,
 And Samson's jilt, when he *asleep*
 My *Ways* well knew; so deep they
 laid their plan, [scam;
 No *telescope* eye their drift could
 Religion's *best* hide my *haggard*
 face, [man's place.
 But weigh'd in *scales* I'm found in

Winners a *Georgium* *side* lately
 found, [around;
 With *mean* *satellites* clothing all
 In *Borshire*, a glimmering *flat* of
 night, [morning light.
 Whose conscious *blushings* shun the
 As from the *bottle* flows the gene-
 rous wine, [base design,
 When I was kind, so flows my
 'Mong votaries whose hearts are
 black as mine.
 As *Mac*, with *bagpipes* makes us play
 our gambols,
 And *Ringwood* Beer when on our
Sunday rambles [please a lady,
 As *woodcock*, and fine lace will
 And sons of *Mars* to have their *fire*-
locks ready; [light me,
 So double plots continually de-
 For which a pen like *Jackson's*
 may endite me,
 Though shades *Tartarean* scarcely
 can fright me.

7. *ÆNIGMA 472*, by Mr. Wm. BOYAN, of Leyland.

In earth's dark womb I *agnal* lay
 conceal'd, [reveal'd;
 Till searching man my noble use
 But mark what hardships I must
 undergo,
 Before I can to just perfection grow
 Yet when I'm freed from off the
 maker's hand, [land;
 My use is known in ev'ry *polish'd*
 Without my aid where would all
 fashions be? [sity.
 Quite lost in dull and dark obscu-

The Ladies fair my useful aid most
 know, [niet go.
 And for their sakes I circling jour-
 Bat what's most strange, and yet
 tis true you'll find, [blind.
 That I'm most useful when I am most
 When hardy sailors spit the briny
 wave, [slave;
 I then am found a curious useful
 I lead them on to India's golden
 store, [native shore.
 And bring them back safe to their

8. *ÆNIGMA 473*, by Mr. J. JACKSON, of Hutton-Rudby.

Can angels grant relief! can heav'n
 inspire! [flow'd fire?
 Can music charm this weak unhal-
 Can all the visions of a golden dream
 Enliven this slow dull and uncouth
 theme? [be true)
 The meanest subject; for that can't
 Brought I not immortality to view?
 Eve, reaching to the fruit did pluck
 and eat, [from her seat
 "Ere she felt the wound, and nature
 "Sighing thro' all her works gave
 signs of woe

"That all was lost." But after this
 you know [brought,
 That I was sent for, and the Saviour
 Sacred was he, whose blood salva-
 tion wrought [use of me?
 For lost mankind! But where's the
 Perhaps design'd to teach humility.
 I once an angel saw, believe my word,
 And in his hand a fearful glittering
 sword, [fell,
 Aghast I gasping trembled, stumbled,
 What *Eve* I *done*, said I; no man
 could tell:

Nor what I saw, till now a day
his eyes [vast surprise;
And let him see his shame with
I pace, in Paris was, made giv
[hey;
For which I was advanced to the
And once preserv'd pure Vesta's
chastity.
Now, on these sightly, and just ver-
dict giv;
Or see what a false judge did once
revere.

9. ENIGMA 474, by Mr. W. M. HARRISON, of Wicksworth.

Est man was created and breath'd
vital air; [and fair;
I boast my existence, am blooming
The rude strolling vapours oft in-
jure my beauty. [duty:
I always am found in the way of my
Nay, should interlopers deform my
sweet charms, [great alarms;
Who by their intrusions oft cause
Yet these my misfortunes I quickly
get over, [recover;
And then all my grandeur again I
Alho' I am deck'd so gallant and
fine,
To speak the whole truth its not pro-
perly mine. [borrow,
The raiment I wear I do only it
And am forc'd to exchange it again
to my sorrow. [of mankind,
My best known ambition's the good
Dispensing my favors to all but the
alien. [is near,
I often bespied you when no friend
Or you wou'd be, filled with terror
and fear.
Wherefore of my friends you oft times
enquire, [ship desire
And for my good service, my friend-

10. ENIGMA 475, by Mr. J. STAFFORD, of Bingham.

Let Rodney or Hood boast the deeds
they have done, [they have won:
What fleets they have taken, or bat-
Or poets relate, and with confidence
tell. [tell;
What numbers by Ajax and Hercules
I may safely aver, and you'll own
it is true, [ever they flew:
I've cut off more by thousands than
For I knock down a hundred per-
haps the first stroke,
And quick the dispatch, when my
rage they provoke:
But ere they are fitly prepar'd for
the fight, [in white;
By a magical touch they array'd are
And then from a cave, dark as Cir-
rhus of old, [and bold,
By the head I pull out a stout hero
Who there at his ease free from dan-
ger was laid,
With his tail like a serpent, turn'd
under his head!
But for keen genius is he that be-
fore we dare enter [temper,
The field, I'm oblig'd oft to listen his
Let him in haste should seize more
of the nerve [quickly subdue,
Than he sharply can conquer or
And tears from the eyes of my
friend should ensue.
Now start not, ye fair, at the tale
I have told, [and to old;
Since familiar I am both to young
Nay, mostly the gents on my aid do
depend
Ere they're fitly accounted to visit a
friend.

11. ENIGMA 476, by Mr. T. NIXON, of Hawarden.

Aid me, ye heav'n-born Muses all
divine, [line;
And let lost numbers flow in ev'ry
Let my life characters veil o'er my
name, [same!
And raise my merit to its mortal
Where the fond shepherd and his
sleepy train, [plain;
In wanton gambols frisk it o'er the
Where bubbling fountains in mean-
dera glide,
Gently wander by my parents' side,
On blissful plains all nature smiling
round [crown'd,
My parents' joy, my parents' wishes
Till fatal ill surpris'd, awoke to
care, [fair;
The best of parents and the fairest

A bold intruder view'd my growing
 charms, [his arms,
 And swiftly caught my parent in
 Here I'm produc'd; but, dreadful
 to relate! [cruel fate
 Soon cut and mangled, doom'd by
 To some clear stream, where Syl-
 via's watchful eye [with joy;
 Observes my motion, sees me move
 Or to some cave, dark, horrid and
 profound, [around,
 Where silence sweet the arching walls
 Whose gloomy path no human foot
 can tread:

There I, alas! am forc'd to hide
 my head, [gen'rous hand)
 Till some commander (thank his
 Brings me to light, and so by his
 command, [surprise
 Like Endor's witch awoke, you with
 See armies spring before your wand-
 ring eyes, [strain by train,
 Taught by his pow'r, I leat forth
 And paint dark horrors o'er the light-
 some plain.
 Enough is said, I now too plain
 appear. [year.
 Farewell, O Muses, till another

12. ÆNIGMA 477, by Mr. S. OXLEY, of Walsingham.

In a dark cavern hid from day,
 Where blithsome Sol ne'er darts his
 My parent lay secure; [ray,
 Till man did tear his mother's breast,
 Dragging him from his peaceful rest,
 Sad tortures to endure.
 With hardships great and trials dire,
 As from the ashes of my fire,
 I into being rose.
 Thro' fire ordeal doom'd to go,
 Where flames appear, and whirl-
 To suffer tenfold woes. [windsbrow,
 A tyrant reigns amid the gloom,
 Whose fury seals my hapless doom,
 How hard must be my fate!
 At his command, his vassals round,
 With blows relentless shake the
 Oh! dreadful to relate! [ground;

At length his anger is repell'd,
 And his terrific rage is quell'd;
 Then hope dispels all fear.
 For when compleat and finish'd quite
 A different form appears to fight,
 My proper name I bear, [rown,
 With care I'm sent straight out of
 And am compell'd to serve the clown,
 The rustic v.g'rous swain:
 Undaunted with him take the field,
 And by his aid make Flora yield,
 Fall prostrate on the plain.
 Another hint, to end my tale,
 I slay whole thousands in the vale,
 Where nature's matchless hue
 A variegated scene displays,
 On which we may with wonder gaze.
 So, gentle bards, adieu.

13. ÆNIGMA 478, by Mrs. ABIGAIL WINTERBOTTOM.

Ye gen'ls, of mind elate, attend
 our tale, [nor rail cease. [speak.
 Divest yourselves of pride and spleen,
 At others, who your seniors are in
 birth; [ther earth. [our can vie? [ruling eye,
 For we, like you, are not from men
 Some say that Ezra was our earthly
 fire, [mer fire: wrong, [strong
 And some say Cadmus with a war-
 But be that as it will, our use is
 known [throne. [Mist; nor rove [prove.
 From Mendicous to George upon the
 Our eldest brother often leads the
 rest, [the best. [mean, [vene.
 And commonly that rule is found
 Hence then we see priority in things,
 As well as heirs of land and choice:
 of kings,
 Yet two of us are shorter than the
 Wa

We are sometimes most solemn and
most grave. [don have;
Anon, a quick and sprightly mo-
Now high, now low, we gently fall
and rise, [surprize
And feed the ravish'd soul with sweet
The lark on high, when rapture
swells his breast, [the nest;
So sweetly chants his matins o'er
The love-lorn swain, the beautiful
blooming maid,

Their several feelings speak but by
our side. [us'd;
In heaven above, by happy spirits
In hell below our virtues are abus'd.
When time shall end, and earth to
chaos turn, [sorrow mourn,
And sinners, black with guilt, in
In darkness Tartarus as tenfold
night,
We then shall be remov'd to realms
of light.

14. ENIGMA 479, by Mr. T. BAKER, of Non-caton.

When fortune frowns, shall I, no
splenish elf,
Debase another to advance myself?
Ambitious friends that devious pro-
vince share,
I'm to enliven and exalt the fair.
Or sex, or age, to favor I'm inclin'd,
Were I extinct, but few wou'd com-
fort find:
Yet I of various ills am oft accus'd
Because weak man indulgency mis-
us'd;
Still I'm as gentle as returning
spring, [dows ring,
And when with melody the mea-
I sport the doves, I ednize the
wood,
Felicitating like the primal good.
But tempers, like the climate, diff-
rent are, [war
Among the Turks I oft occasion
And even here rebellion I excite.
Still give the calmest Christian soul
delight;
Yet so contrarily I act in life,
I in religion cause the worst of
strife. [extremes,
Still I'm a mean between two known
And aid the poet in his noblest
themes,
Soft am'rous raptures I can well
impart,

And in each portrait boast the height
of art. [snow;
I fly dark Zembla and her tenfold
Nor list the burning sands of Borneo.
Resounds the senate with retorting
thunder! [with wonder;
Sudden confusion fills the hall
But soon to order ev'ry one returns;
And when no meteor in the spirit
burns, [proclaim,
Congenial notes Britannia's might
And envious nations fear her rising
fame: [me
So I'm oft dreaded. Sages say from
A chief shall rise in midnight se-
crecy,
Who, cruel tyrant, will no mortal
spare: [horror stare.
Armies shall fall and kings with
Yet from Eliza's chronicles tis
known,
When superb Philip made the ocean
groan, [fought,
He for defensive Britons bravely
And peaceful laurels for their tem-
ples wrought;
Then roar'd the tempest, no kind
hand could save, [grave.
Castilia's flow'r from an unaimely
But for my name: by heav'n's pecu-
liar care, [pair.
I hold the Gordian of the happiest

PRIZE ENIGMA, by Mr. B. WIST.

To whom, *Eumenides*! shall the wretched go
To tell the sad, mysterious tale of woe?
With each humane each tender feeling bless'd,
To thine to hear, and pity the distress'd.
Time was; but now, alas! that time is o'er,
For youthful vigour flown, returns no more!

When fame proclaim'd the triumphs of my reign,
 And vanquish'd heroes languish'd in my train,
 Amongst the captive throng a youth was found,
 Not more for valour than for truth renown'd;
 Who, deeply wounded; sad'ly sigh'd his smart,
 And su'd for pity with the softest art.
 Nor su'd in vain.—My hand a balm apply'd,
 Which bade his sufferings end his toils subside.

Great souls with kindness treat the worthy brave
 Not more delight to conquer than to save.
 Thus I by one kind deed a name obtain'd,
 Which fifty cruel vict'ries ne'er had gain'd.
 Now, all my fond desire of conquest o'er,
 The spotless garb of innocence I wore;
 While music, floating on the morning gales,
 Made blithe the groves, and harmoniz'd the vales.
 To share his fortune, and those sweets to know,
 Which but from virtue's sacred fountain flow;
 From these once pleasing scenes 'twas mine to roam,
 With my lov'd captive to his distant home.
 Near thy warm shores, O China! where the fair,
 And swains obsequious, oft in bands repair;
 The group assembled at an eastern treat,
 All smil'd me welcome to his native seat.
 Here, wing'd with bliss, the minutes sped their flight,
 Love cheer'd the day, and pleasure crown'd the night;
 Attendant blessings grow; the scene was peace,
 And years increasing saw our joys increase.

At length, with aspect looking dread dismay,
 A ruthless victor, whose tyrannic sway,
 Had oft, O Asia! thro' thy wide domains
 Spread terror, and with havoc strow'd thy plains;
 Against my captive, arm'd with vengeful rage,
 Which prayers and tears were bootless to assuage.
 He tell!—Ah me! it wings my foot to tell,
 And with him every earthly comfort fell!
 To gayer robes succeeds the guise of woe,
 And mem'ry gives the tide of grief to flow.
 So oft the morn, o'ercast with tempests, pours
 And sable clouds discharge the copious show'rs.

From that event commenc'd my wretched state,
 To that I owe my sad reverse of fate:
 Better for me perchance it might have been
 Since born to see it, had I sooner seen;
 Then, haply, some fam'd hero, kind as brave,
 Had mild'd my fruitless grief to Lethe's wave;
 But now, desolate, I'm doom'd to mourn
 Past joys, which never, never must return.

Where with the deeds of mighty kings hath told
 You'll find my name, and pick'd acts enroll'd.
 Then, O ye sons of Britain's favour'd zone!

Whose eyes can melt for sufferings not your own;
 To me the need of soft compassion deal,
 And mitigate the woes ye ne'er can feel.

1. REBUS; A CHARADE, by The HERMIT.

Britain's Goddesses ever glorious,	On my <i>whole</i> sedately ponder,
On my <i>first</i> is often crown'd;	Human life you'll justly fear;
By my <i>second</i> , who victorious	Note the emblem, pause with won-
Spread her triumphs all around.	What a fleeting shadow's man! [der;
N. B. These <i>Charades</i> , or <i>Rebus</i> es after the French fashion, must be made	
on <i>nouns substantive</i> of two syllables, each of which must also be a <i>name</i> .	

2. REBUS, by Mr. T. BAKER.

A word oft prefix'd to partner or co.	From these, when connected, will
What some by much time and expe-	aptly be shewn, [known.
rience shew.	Whate'er to the wise is seldom well

3. REBUS, A CHARADE, by Mr. W. CRANE.

Conducive <i>first</i> , tis known that thy	A useful measure is my next, well
produce, [gen'ral use,	known
When right prepar'd, is found of	To ev'ry one in country and in town.
The healing balm it yields, what	My whole contains my <i>first</i> , and re-
can surpass? [ass,	cords prove, [from above,
Yet many a man it turns into an	I've been compar'd to kingdoms

4. REBUS, by Mr. J. WARD, of Hincley.

A distrustful disciple, and trade that's well known,
Name a constant Diarian, of fame and renown.

5. REBUS, A CHARADE, by Mr. R. G. WEST, Adderbury.

My <i>first</i> in the street is well-known	If they no distemper or accident
to abide, [house-side;	have; [writes unto you,
In order to keep quick secure your	When a friend or acquaintance e'er
My next very often brings men to	Then my <i>whole</i> , be assur'd, is more
the grave,	plainly in view.

6. REBUS, by Mr. J. JACKA, of Parranzablu.

My *first* is what lords hold at least once a year,
In my *second* perhaps you thro' danger may steer;
My *whole's* full oft long'd for by black, brown, and fair. }

7. A CHARADE, by Mr. J. RUSMER, of Charlbury.

My <i>first</i> was purchas'd when 'twas	My <i>whole</i> you'll think a prodigy,
lent,	For it has eyes and cannot see,
And into saltry climates sent,	E'en with the clearest glasses;
For poaching priests and friars;	Yet tis an handy partner reckon'd,
My next, the enterprising Cook,	To slip beneath my <i>first</i> and second,
With sword in hand distinguish'd,	By many lads and lassets.
And sent to his employers [look,	

LXXXVII.

32 QUEST. Critical and Philosophical, 1789.

LXXXVII. By Mr. *J. Burrow*, of Bolton-field.

Of what use were Laban's gods, Gen. xxxi. 30. and why so called, as it appears that he feared the God of Abraham and Isaac?

LXXXVIII. By Mr. *J. Carus* of Monkton.

How is that passage in 2 Kings viii. 26. consistent with 2 Chron. xxii. 2. when, according to the former, Ahaziah was 22 years old when he began to reign; but, according to the latter, he would be 42?

LXXXIX. By Mr. *J. Burrow*.

What kind of fruit was it that Amos gathered, Amos vii. 14. and to what use was it applied?

XC. By Mr. *J. Needham*, of Hinckley.

Why is snow of the purest white, since it is nothing but water congealed into flakes?

XCI. By Mr. *David Roberts*, of St. Columb.

Why do those animals that feed on vegetables perspire so much: and those of the carnivorous kind sweat so little? A fox hunted almost to death never sweats.

XCII. By Mr. *Wm. Swift*, of Stow.

Why do meal, ashes, and other bodies of the like nature, weigh heavier when put close together in the bushel, than when not?

XCIII. By Mr. *John Winterbottom*, of Failsworth-School, near Manchester.

What is the cause of that cloudy moisture, observable on the outside of glasses and other vessels, when any cold liquor is poured into them?

XCIV. By *Virgilius*, of Alnwick.

Required a reason why a bird's fountain does not eject more water than fills the trough, tho' the water is above it?

XCV. By Mr. *H. Mellanby*, of Stockton upon Tees.

In glueing any kind of wood, if you rub the surfaces intended for contact with a piece of candle, previous to laying on the glue, the joint will set almost instantaneously: whereas, it is well known, that several hours are required in the common way. The mere knowledge of the fact must be useful to joiners, and the cause pleasing to those who would enquire further into the matter. Now, such to oblige a solution is demanded?

XCVI. By Mr. *John Jackson*, of Hutton-Rudby.

If you take a large sea-shell, in form of a wilk, and put the hollow to your ear, you will hear a noise resembling that of the sea roaring: what is the reason of this?

XCVII. Also by Mr. *Jackson*.

It is known that a common concave mirror will magnify an object viewed in it which will appear erect or upright; but, if you take a bright silver spoon, the concave part of which may be said to act as a mirror, it will not only diminish an object view'd in it, but will also invert it: is this to be accounted for?

ANSWERS to the QUESTIONS proposed last year.

1. QUEST. 583, answered by ORR and 60, at 67 near Bath.

Substitute $x=12$, $y=16$, $z=25$, $x+y=z$ and xy , and the given equations become $x^2+y^2=z^2$, and $xy+z^2=x$, and the 2d and 3d of these added together give $x^2+y^2+z^2=6+c$, which subtracted from $x^2+y^2+z^2=a^2$, putting $xy=z$, gives $r=\frac{a^2-b^2}{2}$, which is therefore given, and by taking ar from $x^2+y^2=z^2$, we obtain the square of $z=b+c-2r=25$, or $z=5$, but $r+x=5$, consequently $x=\frac{5+5}{2}=5$ and $y=\frac{5-5}{2}=0$, also $2y=2xy=c-x^2=384$, being taken from the equation $x^2+y^2=z^2=400$, leaves the square of $y-x=16$, consequently $y-x=4$, $y=16$, and $x=12$.

Ingenious answers were also given by Messrs. T. Baker, J. Bennet, Burrow, Cairus, Cavill, Cock, Crozier, Cunliffe, Dalton, Farey, Glendinning, G. H. J. Harvley, Howard, Jackson, Kilburn, Lawrence, Lowry, Mason, Memonienst, P. Nicholson, A. Oliver, Pfaff, Rowe, Saul, Tasso, J. C. Sherwin, Thorpe, Virgilius, Vunn, White, and Yeale.

2. QUEST. 584, answered by Mrs. JOSEPH YOUNG, of Sheffield.

Put the side of the square in inches, and consequently the number of shillings on each side $=x$, then x^2 the area in inches, and $4x$ the perimeter the sum offered in shillings; then, by the question, as 6272640 inches in one acre : 1000 sh. price per acre :: $x^2 : 4x :: x : 4$, wherefore $x=2590.56$, the area $=$ acre 100.362, and the price offered $=$ £. 501.8 s. 2.4.

And thus, nearly, is the answer given by Messrs. Baker, Bennet, Burrow, Cavill, Cock, Cove, Crozier, Cunliffe, Dalton, Deacon, Far-y, Glendinning, Gregory, Harris, Hawley, Hewitt, Howard, Jackson, Kilburne, King, Mason, Nicholson, Oliver, Paitl, Rowe, Saul, Taylor, Virgilius, Vunn, and White.

3. QUEST. 585, answered by Mr. T. MASON, of Stokely.

Let the triangle ABC represent the given field right-angled at B, and AE, CD, the required perpendiculars meeting the sides CB, AB, produced in E and D. Now, by Euclid, 6. 8. these triangles ABE, DBC, are similar; therefore, as $CD : AE = 3CD : BC$, $BE = 3BQ$; hence, by Eucl. 6. 1. the triangle $ABE = 3ABC$, and $ACE = 4ABC$; hence $AC^2 = AE \cdot CD = 3CD^2$, or $AC = CD\sqrt{3}$, and $AE \cdot AC = 3CD^2\sqrt{3} = 8$ times the given triangle ABC; which gives $CD =$ chain 4. links 69.302, and $AE = 13$ ch. 95.906.



The

The same answered by Mr. J. CAVILL, of Beighton.

The ratio of BD to AB must by similar triangles be the same as that of CD : AE, which is given by the question as 1 : 3; consequently $CB^2 = AB \cdot BD = 3BD^2$, and $AC^2 = AB \cdot AD = 12BD^2$, or $CB^2 : AC^2 :: 3 : 12 :: 1 : 4$, consequently $AC = 2CB$, and the right-angled triangle ABC is half an equilateral one, but the triangle ACD being $= \frac{1}{4}$ of the given one ABC must be $= 300$ poles; but the sine of $60^\circ = .86602 =$ the area of half an equilateral Δ , whose side is unity; therefore, as $.86602 : 1 :: 300 : 346.527794 = CD^2$, hence $CD =$ poles 18.615, and $AE = 55.845$, the length of the two perpendiculars required.

The same otherwise, by Mr. ADAM OLIVER, of Alnwick.

Constr. Take $Ab : bd$ in the given ratio of the perpendiculars; draw bc perpendicular to Ad , cutting a semi-circle described on the diameter Ad in c ; take $AB : Ab ::$ the side of a square $=$ the given area : the side of the square $=$ the given area of the triangle Abc ; and erect BC perpendicular to AB to meet Ac produced in C , so shall ABC be the triangle required. For draw the perpendiculars AE, CD ; then, by similar triangles and parallel lines, $AE : CD :: AB : BD :: Ab : bd$; and similar triangles are as the squares of their homologous sides; therefore, &c.

Ingenuous answers were also given by Messrs. Bennett, Burrows, Cock, Cuscliffe, Dalton, Farry, Glendinning, Hartley, Howard, Jackson, Kilburn, King, Nicholson, Paul, Rowe, Saul, Tasse, Taylor, Vann, White, and Youle.

4. QUEST. 586, answered by Mr. ALEX. ROWE.

Let $a = 13536$ cubic inches in 48 ale gallons, $b = 12$ inches, $c = .7854$, and $x =$ the staff's length or cylinder's depth. Then, per quest. we have these expressions for the square of the cylinder's diameter, viz. $x^2 - x - \frac{1}{2}$, and $\frac{a}{cx}$, which equated give $x^2 - \frac{bx}{2} = \frac{a}{2bc}$, hence $x =$ inches 29.96489, and the diameter $= 23.98244$ required.

The same answered by Mr. PETER NICHOLSON, of Brownlow.

Put $a =$ the solidity in inches, $b = 12$, and $x =$ the length of the staff or depth of the cylinder; now, by quest. the top end of the staff will fall one foot below that of the cylinder, and the depth of the cylinder below the top end of the staff $= x - b$, this with the diameter of the cylinder and staff make a right-angled triangle; therefore the diameter's square $= x^2 - x - b)^2 = 2bx - b^2$, which multiplied into $.7854 \times x =$ the solidity of the cylinder $= .7854 \times (x^2 - x - b)^2 = a$, reduced $x = 29.965$ nearly, whence the diameter $= 23.982$.

Answers

Answers were also given by Messrs. *Baker, Bennet, Burrow, Cavill, Cock, Cockrell, Cove, Crozier, Cunliffe, Dalton, Farre, Glendenning, Gregory, Harris, Hartley, Hewitt, Howard, Jackson, Kilburn, King, Lowry, Mason, Oliver, Paul, Saul, Taylor, Virgilus, White, Youle, and Jos. Sherwin.*

5. QUEST. 587, answered by Mr. JOSEPH SAUL.

Put $w, x, y,$ and $z,$ for the four sides; then, by the question,
 $w + \frac{x+y+z}{3} = 48, x + \frac{w+y+z}{5} = 48, y + \frac{w+x+z}{7} = 48,$ and
 $z + \frac{w+x+y}{9} = 48,$ or $3w+x+y+z = 144, 5x+w+y+z = 240,$
 $7y+w+x+z = 336, 9z+w+x+y = 432;$ the several differences
between the first of these equations and each of the rest being taken
and transposed, &c. give $x = \frac{w}{2} + 24, y = \frac{w}{3} + 32, z = \frac{w}{4} + 36,$ and
 $3w+x+y+z = \frac{49w}{12} + 92 = 144,$ wherefore $w = 12 \frac{36}{49}, y = 36 \frac{12}{49},$
 $x = 30 \frac{28}{49},$ and $z = 39 \frac{9}{49}.$ Now the area will be found the greatest
when the right angle is included between the longest and shortest
sides, and $= 78$ acres, 1 rood, and 8 perches, *fers.*

The same answered by Mr. THO. WHITE.

By the quest. the 4 sides are $\frac{13 \times 48}{49}, \frac{31 \times 48}{49}, \frac{37 \times 48}{49}$ and $\frac{40 \times 48}{49},$
or they are as 13, 31, 37, and 40. Now, that arrangement of the
sides, which approaches the nearest to be inscribed in a circle when
one angle is right must be the required arrangement. We have then
these six combinations of the sides taken in pairs to contain the right
angle, viz. 13, 31; 13, 37; 13, 40; 31, 40; and 37, 40; and,
lastly, 31, 37; and of these the 4th and 5th are impossible; but the
third pair, viz. 13 and 40, being made to contain the right angle,
howsoever the remaining sides 31 and 37 are arranged, will make
the trapezium a maximum.

It was also ingeniously answered by Messrs. *Bennet, Burrow, Cavill, Dalton, Glendenning, Hartley, Howard, Jackson, Mason, Nicholson, Oliver, Rowe, Taylor, and Youle.*

6. QUEST. 588, answered by Tasso, of Bristol.

Assume $xy = x;$ then supposing y constant $xy = x,$ and by substitu-
tion $a^2 x^2 y + b y x^2 y = c^2 x,$ consequently $\frac{c^2 x}{x^2} = a^2 y + b y$ the fluents
give $-\frac{c^2}{x} = a^2 y + \frac{1}{2} b y^2 = -\frac{c^2 y}{x},$ or $x = -\frac{c^2 y}{a^2 y + \frac{1}{2} b y^2} = \frac{c^2}{a^2} \times$
 $\frac{b y}{2 a^2 + b y} - \frac{y}{y},$ the fluents are $x = \frac{c^2}{a^2} \times \text{hyp. l. of } \frac{2 a^2 + b y}{b y},$ where,
when $x = 0, y$ is infinite, and when $y = 0, x$ is infinite; therefore
C 2

the infinite values of x and y are the asymptotes of the curve to which the given equation belongs.

The same answered by Mr. JOHN GOUGH, of Kendal.

Here y is to be supposed to flow uniformly, or \dot{y} constant, and multiplying the equation by $\frac{\dot{y}}{x^2}$, we have $a^2\dot{y} + b\dot{y}y = \frac{c^2\dot{y}x}{x^2}$, and by taking the fluent we have $a^2y + \frac{1}{2}b\dot{y}y = -\frac{c^2\dot{y}}{x}$, or $\dot{x} = -\frac{c^2\dot{y}}{a^2y + \frac{1}{2}b\dot{y}y}$, and the fluent gives $x = \frac{c^2}{a^2} \times \text{hyp. l. of } \frac{2a^2 + by}{by}$.

And in much the same manner is the answer given by Mr. *J. Gunliffe*, of Bolton, and Mr. *T. White*. Mr. *A. Oliver* gives the answer by series. But the quest. admits of a different answer without series, by considering that the given equation also results from the fluxion of $a^2y + \frac{1}{2}b\dot{y}y = d^3 - \frac{c^2\dot{y}}{x}$ by making \dot{y} constant, where $d^3 =$ any constant quantity whatever, hence finding the value of \dot{x} and taking the fluents $x = \frac{c^2b}{g} \times \text{hyp. l. of } \frac{g+f+y}{g-f-y}$; $\sqrt{\frac{2d^3b+a^4}{b^2}}$ being $=g$, and $\frac{a^2}{b} = f$. Here y may be $=0$, and therefore the curve cuts its abscissa. But if $d^3=0$, the fluent here fails, and the value of x must be found as in the two preceding ingenious answers.

7. QUEST. 589, answered by Mr. ALEX. ROWE.

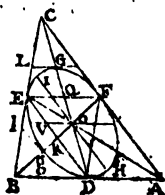
Put $a =$ the tang. of 30° , $b =$ that of 50° , x and $t =$ the sine and tangent of the latitude or gnomon's height in an horizontal dial; then, by spherics, as rad. $1 : x :: a : ax =$ the tang. of the distance of the ten o'clock hour line from the meridian, the tangent of the sum of this distance and the latitude $= \frac{t+ax}{1-axt} = b$, per quest. where $t = \frac{x}{\sqrt{1-x^2}}$, and this equation is most easily resolved by trial,

whence $t = .54009$ the sine of $32^\circ 41'$ the stile's height required.

An thus it is answered by Mr. *John Bennet*, of Freefall, and Mr. *T. White*.

8. QUEST. 597, answered by JOHN HOWARD.

By Simpson's Geometry, p. 201. the triangle EFD will be the greatest that can be described in the ellipsis $DEGF$ when the tangents AB , AC , BC , are bisected in the points of contact D , F , E ; and it is proved, by writers on conics, that the lines CD , BF , AE , will all pass thro' O the centre of the ellipsis, and since these lines bisect the sides of the triangle ABC , they are by the known property of the triangle all divided



at O into segments which are in the ratio of $2 : 1$; therefore $GO = DO = \text{half } CO, = 2QO$ by sim. Δ 's, and $GC = GO = OD$, the triangle $EFD = EBD = FDA = CEF = \text{one-fourth of } ABC$. And since all triangles, whose sides are bisected by the same given inscribed ellipsis are equal in area, in order to determine the limits of the angle, the area of the triangle DEF may be supposed to retain its value $= a$; let $x = \text{fine of } DQF$, $OD = m$, $VO = n$, s and $c = \text{fine and cosine of } DFQ$, $r^2 = \text{the sum of the squares of the semi-axes}$; then, per ellipsis, $OD^2 : VO^2 :: DQ : QG :: \frac{1}{2} OD^2 : QF^2 = \frac{3n^2}{4}$

$m^2 + n^2 = r^2$, and $\frac{3mnx\sqrt{3}}{4} = a$, and by trigonom. $QD = \frac{3m}{2} : s :: QF = \frac{n\sqrt{3}}{2} : \frac{m}{m\sqrt{3}} = \text{fine of } FDQ$, and the fine of DQF or $DQE = DFQ$

+ $FDQ = x = \frac{s}{m\sqrt{3}} \times \sqrt{3m^2 - s^2n^2} + cn$, and by substitution in the equation

for a above we have $\frac{3ns}{4} \times \sqrt{3r^2 - 3n^2 - s^2n^2} + cn = a$, and $a^4 =$

$2pn^2 = -\frac{4a^2}{9s^2}$, hence $n = \sqrt{p \pm \sqrt{p^2 - \frac{4a^2}{9s^2}}}$, where $p = \frac{3r^2}{8} + \frac{ac}{3s}$.

Therefore, that the thing may be possible, it is manifestly necessary that p be greater than $\frac{2a}{3s}$, or $\frac{3r^2}{8}$ than $\frac{2a-ca}{3s}$. Hence it appears,

that quest. 400. (Gentleman's Diary) was both improperly proposed and erroneously answered; for there the latter quantity which ought to be the least will exceed the former by 64.017, and consequently is impossible; wherefore, in such cases, the greatest triangle will be isosceles, having its known angle placed at the extremity of either the greater or less axis IH , or GF , according as the tangent of its half is less or greater than the semi-conjug. OF ; IO being supposed radius in the former case, and OF in the latter. Now, in the above-mentioned example, RF will be found $= 33.108$, and the triangle $EFD = 1067.48064$.

N. B. If the angle DQF had been given, then the prob. would be easily constructed by prop. 82. p. 67. Emerson's Conic Sections. Moreover, s^2 may also be found by a quadratic in terms of q , r , and n , and thus the exact limits of possibility will emerge, but it is too complex to be put down here.

The answer by Mr. T. White is to the same effect. And Mr. A. Oliver, and Mr. Rowe, also sent answers.

q. Quest. 591. answered by Mr. JOHN DALTON, of Kendal.

Put $c = .25$ foot, $p = .5236$, q , r , and $s = \text{the specific gravities of oak, oil, and water respectively}$, and $x = \text{the height of the whole segment immersed}$; then, by the property of the circle, $x - x^2 = \text{the square of the radius of the segment's base}$, and its solidity $= p \cdot 3x^2 - 2x^3$, again, $x - c = \text{the height of the segm. immersed in water}$, its solidity $=$

$p \cdot 3 + 6c \cdot x^2 - 2x^3 - 6c + 6c^2 \cdot x + 3c^2 + 2c^3$; but the difference of these $= p \cdot 6c + 6c^2 \cdot x - 6cx^2 - 3c^2 - 2c^3 =$ the solidity of the zone immersed in oil, which $\times r$ + that in water $\times s = pq$, per quest.; this reduced and brought into numbers is $x^3 - 156528x^2 + 48159x = 454073$; the three roots are 1.153, .86678, and -45437 foot, where it is evident the second only can be applied. Whence the part in water $= .352$, and that in oil $= .14626$ parts of a solid foot.

The same answered by Mr. H. TAYLOR, of Knarebro'.

Put $a = 12$ the diameter of the globe, $b = 3$, $p = 4890$, $q = 4815$, $r = 5274$, and $x =$ the height of the segment unimmersed, then its solidity omitting the common multiplier .5236 is $3ax^2 - 2x^3$, and that unimmersed in water $= 3ax^2 - 2x^3 - 6bx^2 + 6abx - 6b^2x + 3ab^2 - 2b^3$, from which take the former, and there remains $6abx - 6bx^2 - 6b^2x + 3ab^2 - 2b^3 =$ that in oil, and $a^3 =$ that out of the water $=$ that in water; but $9 \times$ that in oil $+ r \times$ that in water $= pa^3$, this equation reduced and brought into numbers is $x^3 - 17.167236x^2 - 7.05x = 51.1578$, from which $x = 1.5986$ nearly; therefore the solidity immersed in oil $= 253$ inches nearly, and that in water $= 608$ nearly.

Ingenious answers were also given by Messrs. Gavill, Cock, Cunliffe, Jackson, Mason, Nicholson, Oliver, Rowe, Saul, and White.

10. QUEST. 592, answered by Mr. J. CUNLIFFE, of Bolton.

The general term of the series is $9 \times \frac{x+4 \cdot x+5}{x \cdot x+1 \cdot x+2 \cdot x+3}$, and by comparing this with the formula M' , M'' , in *Clarke's LOGICA*, the whole sum of the series is $= 19$, and the sum of any number n of terms is $\frac{30n}{n+1} - \frac{12n}{n+2} + \frac{n}{n+3}$, as required.

The same answered by TASSO, of Bristol.

The n th term of the given series is $\frac{9 \cdot 45}{n \cdot n \cdot n}$, and $s =$ the $n+1$ th term

$\frac{9 \cdot 45}{n \cdot n \cdot n} = \frac{9}{n \cdot n} + \frac{72}{n \cdot n \cdot n} + \frac{180}{n \cdot n \cdot n \cdot n}$, and the correct integral $s = 19 -$

$\frac{9 \cdot 36}{n \cdot n \cdot n} = 19 - \frac{9n^2 + 63n + 114}{n+1 \cdot n+2 \cdot n+3}$, the sum of n terms re-

quired. And when n is infinite $s = 19$, the exact sum of the whole series. And in the very same manner is the answer given by Orlando. It was also ingeniously answered by Mr. A. Oliver and Mr. T. White.

11. QuesT. 593, answered by Mr. J. BENNETT, of Presfall.

Put x = the versed sine of the arch to radius unity, then will $1-x$ = its cosine, $2-x$ = the versed sine of the supplement, and by Emerson's Trig. prop. 2. cor. 4. the cosine of twice the arch to rad. 1. is $2-2 \times$ square of the sine $= 1-4x+2x^2$, which drawn into x , put into fluxions and reduced, gives the equation $x^2 - \frac{4}{3}x = -\frac{1}{6}$, whence $x = .1396203$, the versed sine of the arch of $30^\circ 38' 27''$ required.

The same answered by Mr. T. Cock, of Cirencester.

Put the col. of the required arc $= x$, then $1 - x$ the versed sine, $\sqrt{1 - x^2}$ the sine, and $1 - x \times 2x^2 - 1$ the rectangle under its versed sine and the cosine of its double, which is to be a maximum:

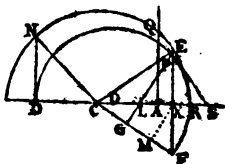
$\sqrt{\frac{5}{2}}, +1$

fluxed, and reduced gives $x = \frac{2}{3} = .6667$ the cosine of $90^\circ 38\frac{1}{2}$ the required arc.

And thus the answer is given by Messrs. *Carroll, Dalton, Farcy, Hewitt, Howard, Oliver, Rowe, Saul, Taylor, White, and York.*

A Geometrical Solution, by EUMENES.

Construction. Bisect a quadrant of the given circle NERF in N, from which let fall ND perp. to the quadrant's radius, produce it at radius till it cuts the given circle in R, from the centre C of the given circle along the diam. set off CA = DC, and erect AQ perp. to the diam.; then on the diam. DR describe a semi-



circle whose center is O; from O toward A take OL=two-thirds of OA, and then, by the well known method, find the point X such that the rectangle under OX and LX may be equal to one-third of the square on the given line OR; at X erect EX perp. to the diameter, which will cut off from the given circle the arc ER required.

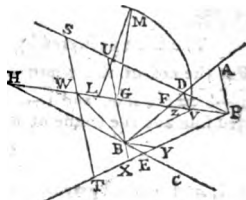
Demonstration. Continue EX till it cuts the given circle again in P, at the point P where EX cuts the circle DPR, draw the tangent P³ cutting AQ in Q and the diam. produced in S, draw the radius CF, and let fall XM, EG perp. there o. Then, because OL = two-thirds of OA, and OX . LX = one-third of OR²; therefore 3OX . LX = OR² = 3OX² - 3OL . OX = 3OX² - 2AO . OX, and OR² = OX² = PX² = 2OX² - 2AO . OX = 2AX . OX; but OX : PX :: PX : SX, PX² = OX . SX = 2AX . OX, therefore SX = AX; consequently AX is the altitude, and PX the radius of the base of the greatest cylinder that can be inscribed in the globular segment, whose altitude is AR; or, by Simpson's Geom. p. 259. PX² . AX = AX . RX . DX = RX . $\frac{CX^2 - CA^2}{2}$ = RX . $\frac{CX^2 - \frac{1}{4}CF^2}{2}$ is a maximum; therefore RX . $\frac{2CX^2 - CF^2}{4}$ = RX . $\frac{CA^2 - FA^2}{4}$ is a maximum.

Now, because $EX = FX$, therefore $GM = MF$, and $CG = CM - MF$; but, by trigonometry, as the base CF : sum of the sides $CX + FX$: the difference of the sides $CX - FX$: the difference of the segments of the base $CM - MF = CG$; therefore, $CG \cdot CF = CX^2 - FX^2$, and $RX \cdot CG \cdot CF$ is a maximum; but CF is given, and therefore the rectangle under RX and CG is a maximum. *q. c. d.*

12. QUEST. 594, answered by Mr. T. WHITE of Dumfries.

Geometrical Analysis.

Conceive the thing done, let PS , PT , be the required lines, thro' B parallel to ST draw UX , and W being given, draw PW meeting UX in G a given point, thro' D and P parallel to ST draw DZ , PA , and A is given, also H the intersect on of CB , WP is given, and PW , AB , intersect in F a given point. Thro' B , parallel to PW , PT , draw BY , BV .



The triangle PGV is similar to PZD , and PGX to VGB ; therefore $PG : UG :: ZP : DZ$, and $PG : GX :: VG : GB$, hence $UG : GX :: DZ : VG :: ZP : GB :: SW : WT$ a given ratio; \therefore :: a given line $A : GB$, hence $A : GV :: DZ : ZP$; but $PF : PA :: FZ : ZD$, and *componendo* $A : PF : GV : PA :: FZ : ZP$; let a line $B : AP = A : PF$ and $B : GV :: FZ : ZP$, or $B : B + GV :: FZ : FP$. Again, the ratio of $DB : BE$ is given, let it be :: $BF : C$, and DZ being parallel to GB , $BF : BD :: GF : GZ = GF + FZ$.

So $C : BE :: GF : GF + FZ$, but the Δ 's BEY , HBV , are similar, so $BE : BY = GP - GV :: BH : HG + GV$, *componendo* $C : GP - GV :: GF : BH : (GF + FZ) : (HG + GV)$, take D such that $D : C = GF : BH$, which is given, and then $HG + GV : GP - GV :: D : GF + FZ$, or $HG + GP : HG + GV :: D + GF + FZ = E + FZ : D$; but from above $FZ : (B + GV) = B : FP$ so $HP : HV :: E : B + E : GV + B : FP : D : B + D : GV$, that is, $D : HP : HV :: E : B + FP : B + E : GV : B + GV$; make $E : F = D : HP$ and $E : G = FP : B$; and $F : to HV :: B + G + GV = H + GV : B + GV$, hence the difference of the rectangles $F \cdot B$ and $H \cdot HG$ is equal to the rectangle under GV and $HG + H - F + GV$, *ergo solutum.*

Constr. If $H \cdot HG$ be less than $F \cdot B$, take GL such that $2GL = HG + H - F$, draw GM perp. to GL and = the side of the square which is $= F \cdot B - H \cdot HG$ with LM rad. draw the circle cutting LP in V , thro' M parallel to PV when drawn, draw PT , take $GB : A :: TW : WS$, draw PS and the thing is done. If $H \cdot HG$ be the greater recta gle, GL must be set off towards P , &c. The truth is clear from the analysis.

This was also ingeniously and truly answered by Mr. J. Gough.

13. QUEST. 595 answered by Mr. ADAM OLIVER.

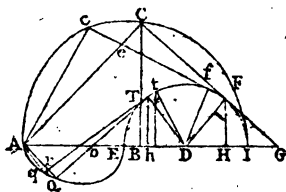
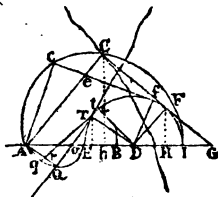
Let ETI be half of the circle, $EQACI$ the semi-curve, and A the given point. Draw lines as in the figure; then, by sim. right-angled triangles, $TD : Tb :: OD : OT :: AO : OQ :: OD + AO = AD : OT + OQ = TQ$. Now, put $r = DT = DE - DI$, $AD = s$, Eb

$=x, y=TQ$ and $z=$ the arch ET ; then, by the property of the circle, $Tb=\sqrt{2ax-x^2}$, and by the above proportion $y=\frac{a}{r}\sqrt{2ax-x^2}$ for the nature of the curve. Again, by similar sectors, $DT(r):Tt(x)::TQ(y):Qt=\frac{y\delta}{r}=\frac{ax}{r}$, and $\frac{ax}{2r}\times y=\frac{a^2x}{2r^2}\sqrt{2rx-x^2}$ =the area of $QTq=\frac{a^2}{2r^2}\times$ fluxion of the circular segment ETb , whose fluent or the area $EQTE$ must therefore be equal to $\frac{a^2}{2r^2}\times$ area of the segment ETb , and $EQACITE=\frac{a^2}{2r^2}\times$ area of the given semi circle. And when the given point is on the circle as at E , then $a=r$, and the area becomes that of a quadrant of the given circle.

The same answered by Mr. J. FAREY, of London.

Let D be the center of the given circle, A the given point, C a point in the curve, CF a tangent to the circle cutting AD produced in G , BC and HF perp. to AG . Put the rad us $DE=DI=DF$ of the given circle $=r$, $AD=a$, $AB=x$, and $BC=y$; then $AC=\sqrt{x^2+y^2}$, and $\frac{y^2}{x}=BG$, also $AG-AD=\frac{y^2}{x}$, $DG=\frac{y^2}{x}+x-a:r::\sqrt{x^2+y^2}:y^2$
 $:x$, or $y^2+x^2-ax=r$
 $\sqrt{x^2+y^2}$ is the equation of the curve which is a line of the fourth order, and of Dr. Waring's 5th case. Hence

$y^2=\frac{1}{2}r^2-x^2+ax\pm\sqrt{ax+\frac{1}{2}r^2}$, where, if $x=0$, $a=r$, or $a+r$, then $y=0$, or A, E , and I , are in the curve, when $x=0$ at A , then $y=r$, and when $x=-\frac{r^2}{4a}$, $y=\pm\frac{r}{4a}\sqrt{4a^2-r^2}$ the limiting ordinate, and $x=\frac{4a^2-r^2\pm\sqrt{8a^2+r^2}}{8a}$ when y is a max.



For the area, let $v=$ the versed sine HI of IF , then $DG=\frac{r^2}{r-v}$, and

$r:r-v::AD+DG:AC=\frac{ar+r^2-av}{r}$, and the indefinitely slender triangles

S and FE, and consequently
equality $CI : ST :: FU$.
 $M - FP : PD : FU . KL =$
 $P . AB :: FU . PM . ST -$
 $P : PD . ST = FU . FP . CT$
 $- FP . PD . ST : ST . FP .$
 $B :: FU . CT - PD . ST :$
 $F . AB :: FU . CT - ST .$

$M - IM - DI, = FU . CT$
 $- FP . CT + CI . CT + ST .$
 $= CT + CI . CT +$

$I = DB . B . CT + DI . ST : ST . AB$, consequently $CI . AB =$
 $CT + DI . ST$; but CI, AB, Bq , and DI , are all given lines, and
T and S are the abscissa and ordinate of the required locus; therefore
is the equation thereof. Through C and D draw a line cutting
A produced in Z, through Z, parallel to CB, draw a right line ZW;
which, as is easily shewn, will pass thro' S, and be the locus required.

Mr. White, the proposer, supposes A and B equi-distant from, but
contrary sides of, DE, and finds in that case the locus a line of the
3rd order; but our room is too scanty to admit of it. And Messrs,
i.e. and R we also sent answers.

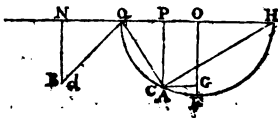
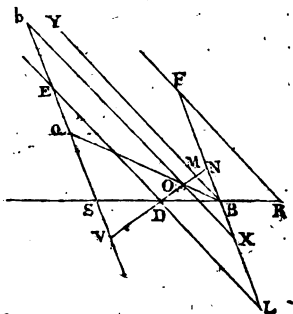
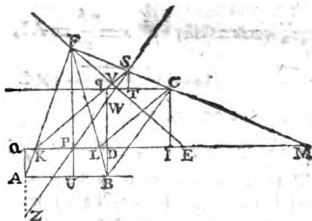
16. QUEST. 598. answered by the PROPOSER.

Produce DB both ways till SD
 $BR = DB$; thro' R, parallel to
the line BM given in position draw
a cutting BN in F, and thro' S,
parallel to BN, the other line given
in position, draw SY, which is
the required line given in position:
thro' D draw any right line UN
cutting SY in U, BN in N and
BM in M; take $MO = MN$, then
from B thro' O draw BQ cutting
UN in Q, and making the apotome
UQ thereon, which, howsoever,
the line UN is drawn thro' D,
all always be of the same constant length.

For parallel to MB, thro' O, draw YX, and thro' D draw EL, then
because $MN = OM$, therefore $NB = BX$, and $QU = QY$; but $SD =$
 BR , therefore $FB = BL = SE$. and $FN = XL = YE$ $LN = EU$,
 $= NB$, $EU + YE = LN + FN = FL = UY = 2FB = 2QU$; there-
fore QU is always equal to FB a given or constant line. *q. e. d.*

The PRIZE QUESTION answered, by Mr. JOSEPH EDWARDS.

Let QFH be one of the semi-
circles whose center is O, a QG half
string which passes over the pin
and connects the weights B and
which put $= l$, $QH = a$, $QN = a$,
the path of B $= x$, its velocity



at $d=v$, $dQ=y$, the velocity of A up the circle at $C=v$, the arch $AF=z$, $CP=s$, and g =the force of gravity per second.

Then if B be taken away, the motive force of A down the circle

will be $\frac{z}{r} \times \frac{gA}{u}$, and $A \times u - \frac{g^2}{u}$ the whole motive force up the circle by the action of the string, and by the resolution of forces that in

CQ , Qd will be $A \times \frac{z}{y} \times u - \frac{g^2}{u}$ and $A \times \frac{z}{x} \times u - \frac{g^2}{u}$, respectively,

which last being doubled (because the other weight A in the other semi-circle has the same force), gives the whole motive force at $Nd =$

$\frac{2Az}{x} \times u - \frac{g^2}{u}$ in the time $\frac{z}{u}$. Again, if B were at liberty, its

motive force would be $\frac{Bg\dot{x}}{v}$ in the time $\frac{\dot{x}}{v} = \frac{z}{u}$ instead of Bv , conse-

quently $\frac{Bg\dot{x}}{v} - Bv = \frac{2Az}{x} \times u - \frac{g^2}{u}$, whence, by writing u for $\frac{v\dot{x}}{x}$,

putting $u = \frac{B}{2A}$ and taking the fluents $v^2 = \frac{2g}{m} \times (mx - \frac{u^2}{2g} - \frac{1}{2}r + s)$;

but $\frac{v\dot{x}}{y}$ the velocity of B in dQ , or A in Qc , and as $CH : r ::$

$\frac{v\dot{x}}{y} : u$, or putting $CH=w$, $v^2 = \frac{g w^2 y^2}{m w^2 y + r^2 x^2} \times 2mx - r + 2s$. Now,

when the motion ceases $v^2=0$, $s=0$, $2mx=r$, $x=\sqrt{\frac{1}{2}r^2 - a^2}$, or

$A : B :: \sqrt{\frac{1}{2}r^2 - a^2} : r$, the required ratio when B will just raise the other two to the horizontal diameters.

Lastly, because the tension of the string in direction Nd is as the motive force lost in that direction during the elementary time

$\frac{\dot{x}}{v}$ therefore $\frac{Bg\dot{x}}{v} - Bv$ is as that tension, and $\frac{Bg\dot{x}}{vx} - \frac{Bv\dot{v}}{x}$ as that in

dQ , which being divided by twice the force of gravity in the same

time, because the string hangs double, gives $\frac{By}{2x} - \frac{Bv\dot{v}}{2gy}$ for the re-

quired tension of the string; or the mass, which being suspended at rest, would have the same effect in stretching the string as the bodies

in motion have.

Examen, the Proposer, retaining the notation in last year's solution to the *prize quest*, when adapted to this, makes the unknown weight $=V$, which would have the same effect to stretch the string hanging at rest, as the bodies in motion have; and says, that from common principles, it is evident that V must be such that

$g - \frac{2g\dot{v}\dot{x}}{By} \times \frac{y}{v} = v$, hence $V = \frac{By}{2x} - \frac{Bv\dot{v}}{2gx} = \frac{Bx}{2y} - \frac{Bv\dot{v}}{2gx}$, because in the

present

present case y ~~years~~: and B, or rather half B, is accelerated by the force g in direction BS, and retarded by $\frac{2gVx}{By}$. As to Mr A's general expression mentioned last year, it is true on the supposition that the fluxion of the time is a constant quantity, but on no other.

Answers to this question were also given by Messrs. *Cunliffe, Gough, Howard, Jackson, and White*.

The first Prize of 12 Diaries, for the solution to the Prize Question, belongs to Mr. *J. Gough*, of Kendall; the second of 6 Diaries to Mr. *Edwards*, of Hoston; 9 for the Pr. *Æ.* to Mr. *Burrow*, of Boltonfield; and 9 to Mr. *Baker*, of Nonceaton, for the general answer.

New Mathematical QUESTIONS, to be answered in next Year's DIARY.

(1.) QUEST. 600, by EUMENES.

How pleasant! in the days of youth,	Avaunt! ye cumber-grounds, may you
To search for and discover truth;	By rays of genius be pierc'd thro'
Who kindly opes her copious store,	Till pride be quash'd, in folly's guise!
Without respect to rich or poor;	But you, ah few! ye learned wise!
Her votaries, in wisdom's ways,	The height of learning is, ye own,
By reason crown'd with honour:	To know how little can be known;
Shun the fell paths of folly's throng,	Who wish to find what's true and right,
And falshood with her double [tongue,	And place it in the clearest light;
And drunkenness, with turpitude	Nor think aught little which dis-
So simply vain, so basely rude,	plays [blaze;
Aiming of <i>care</i> to stop the course	Truth, in her clearest brightest
Who still returns with tenfold force;	Take an <i>ellipse</i> , the axes known,*
And vanity, and human pride	To cut, then let a way be shewn,
Whose constant aim is truth to hide,	A space triangular therefrom,
But with the same success as night	Which both may be a <i>maximum</i> ,
Withstands the dawning orient	And have one angle, all may see,
light.	The greatest possibly can be.

* 70 and 50.

(2.) QUEST. 601, by Mr. J. B.

The sum of two numbers multiplied by the greater is 7169; and their difference multiplied by the lesser is 769; now exercise yourselves, ye beginners in algebra, and find the numbers?

(3.)

(3.) QUEST. 602, by Mr. T. BAKER, of Maccaton.

Fair Sally, aged 32, wants an husband; she can and will, she says, earn one shilling per week whilst she lives, over and above her clothes and maintenance; what is the value of her at 5 per cent. compound interest?

(4.) QUEST. 603, by Mr. J. CAVILL, of Beighton.

To determine the point P in the given diameter $AB=14$ of a circle, such that making the chord $BC=AP$, a line drawn from P to C may be of a given length=9.

(5.) QUEST. 604, by Tasso, of Bristol.

Given the point D in the side AC of a given plane triangle ABC to determine another point E in DC so that drawing EF parallel to CB, meeting AC in E, and AB in F; the rectangle under DE and EF may be equal to a given square?

(6.) QUEST. 605, by Mr. JOSEPH YOUNG, School-Master.

Given the verticle angle of a plane triangle, and the radii of two circles inscribed in the parts thereof made by a perpendicular let fall from the given angle upon the base; to construct the triangle?

(7.) QUEST. 606, by Mr. J. FLETCHER, of Liverpool.

If through any point P in the periphery of a circle, that is wholly included in another, an indefinite number of right lines be drawn to cut the periphery again in R, and terminate in the circumference of the greater circle in E and F, and from E towards F there be always taken EL equal to RF; required the locus of the point L?

(8.) QUEST. 607, by Mr. JOS. EDWARDS, jun. of Hoxton.

Two lines AB and AC are given in position and magnitude, to find the point p in the former such, that drawing pO to cut off Ap, AO in the given ratio of P to Q, the remaining segments pB, OQ shall have the given ratio of Q to R?

(9.) QUEST. 608, by Tasso, of Bristol,

Given the line bisecting the vertical angle, and the differences of each side and the adjacent segment of the base made by the said bisecting line, to construct the triangle?

(10.) QUEST. 609, by Mr. J. FLETCHER, of Liverpool.

Seeing an exciseman's staff in form of a cylinder three fourths of an inch in diameter and 36 inches long, immersed in a vessel of beer at one end, and the other resting upon the edge of the vessel, 3 inches above the liquor, I observed 13 inches along the staff to be dry, required the weight of the staff?

(11.)

(11.) QUEST. 510, by Mr. J. HOWARD, of Carlisle.

Given the height of the fall, and the velocity of the water acting on a mill-wheel, to determine the proportion of the velocity of the wheel to that lost by the resistance of the machine, so that the effect may be a maximum? This is here re-proposed because the answers hitherto given are thought unsatisfactory.

(12.) QUEST. 511, by Mr. J. SAMPSON.

What is the equation of the curve, which is every where equidistant from that of a given conic section?

(13.) QUEST. 512, by Mr. BURROW, of Beltonfield.

Let $G A$ be drawn perpendicular to the diameter $A D$ of a given semicircle, it is required to draw $G C$ parallel to $A D$ cutting the circle in B and C so that joining $A B$, $A C$, the excess of the triangle $A B C$ above $A B G$ may be the greatest possible?

(14.) QUEST. 513, by Mr. J. GUSH, of Kendal.

If a hollow upright cylinder filled with water revolve about its axis, with an angular velocity increasing as any power of the time, to determine the quantity of water discharged over the margin of the vessel in any time, supposing the velocity at the end of a second known, and the water and vessel to revolve with the same velocity?

(15.) QUEST. 514, by Mr. ROWBOTTOM, of West-Hallam.

If tangents, terminating in the axis produced, be drawn to a given conic section, and perpendiculars to the middle of them meet the corresponding ordinates produced if necessary, the equations and quadrature of the loci of both the ends of these perpendiculars are required?

(16.) QUEST. 515, by Mr. A. OLIVER, of Alnwick.

Suppose the earth to be a perfectly homogeneous sphere, 12 millions feet in radius, a hole perforated diametrically thro' it, and three non-elastic balls, whose quantities of matter are as 1, 2, and 3, were let fall at the interval of 20 minutes from each other; when and where would they come together, the perforation being also supposed a vacuum?

PRIZE QUESTION, by Mr. T. MOSS, of London.

To find a series of whole numbers, each term of which being divided by 14 shall leave a remainder of 4; divided by 50 shall leave a remainder of 30; divided by 35 shall leave a remainder of 45; and also each term divided by 95 shall leave a remainder of 85; by a general method which may be applied to the solution of any other question of the like nature?

FINIS.

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OR

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[Price stitched, NINE-PENCE.]

<i>Y. of Christ.</i>	<i>To. since.</i>	<i>Y. of Christ.</i>	<i>To. since.</i>
1600 King Charles 1. born	189	1724 Q. Anne died, K. Geo. I. succ.	75
1603 Q. Eliz. died, K. Ja. succ.	180	1715 Rebellion in the north	74
1603 A great Plague in London	186	1716 A very great frost	73
1605 Popish Gun-powder Plot	188	1726 Sir Isaac Newton died	63
1616 Shakespeare the poet died	193	1729 K. Geo. I. died, Geo. II. succ.	62
1625 K. James died, Cha. I. succ.	164	1739 War against Spain declared	50
1641 Bloody Irish massacre	148	1739 A very great frost	50
1642 Sir R. Bury born, Dec. 28	192	1741 A great comet appeared	46
1649 K. Charles I. beheaded	140	1744 War against France declared	45
1658 Oliver Cromwell died	131	1745 Rebellion in Scotland	44
1660 K. Charles II. restored	129	1748 A general peace	41
1662 Royal Society instituted	127	1750 Westminster bridge finished	39
1665 Died of the plague 68,586	124	1752 Date and Calendar altered	37
1666 Great fire in London	123	1756 War against France declared	35
1666 War against Denmark death	123	1760 K. Geo. III. died, G. III. succ.	21
1667 Peace with Hol. Fr. & Den.	122	1762 American philos. soc. instit.	27
1672 War against Holland decl.	117	1762 War against Spain declared	27
1673 Halfpence & Farth. coined	117	1763 Peace with France & Spain	26
1674 Peace with Holland procl.	115	1765 Otaheite discovered	24
1679 Habeas Corpus act passed	110	1770 Blackfriars bridge finished	21
1685 K. Cha. II. died, Ja. II. succ.	104	1772 A revolution in Denmark	21
1688 Prince of Orange landed	101	1772 A revolution in Sweden	21
1688 K. James II. abdicated	101	1775 War against America begun	24
1689 Wm. and Mary crowned	100	1776 America declared independent	27
1693 Hackney coaches established	96	1778 French treaty with America	21
1702 K. Wm. died, Q. Ann succ.	87	1778 War against France begun	21
1702 War against France declared	87	1779 War against Spain begun	20
1707 England & Scotland united	82	1780 War against Holland begun	9
1713 Peace with France procl.	76	1783 A general peace	6

BIRTH-DAYS, [N.B.] and YEARS, of the ROYAL FAMILY of GREAT BRITAIN.

KING GEORGE III. June 4, 1738	Prince Aug. Fred. Jan. 27, 1793
Prince of Wales, August 12, 1762	Prince Adolph. Fred. Feb. 24, 1794
Prince Frederick, August 26, 1763	Princess Mary, April 23, 1776
Prince William Henry, Aug. 21, 1765	Princess Sophia, Nov. 30, 1777
Pr. Charl. Aug. Mat. Sept. 29, 1766	Princess Amelia, Aug. 7, 1783
Prince Edward, Nov. 2, 1767	Queen Charlotte, May 29, 1744
Pr. Augusta Sophia, Nov. 2, 1768	Pr. Augusta of Bavaria Aug. 11, 1737
Pr. Elizabeth, May 22, 1770	Duke of Gloucester, Nov. 25, 1743
Prince Ernest Augustus, June 5, 1772	Duke of Cumberland, Nov. 7, 1743

YEARS of BIRTHS of the Principal SOVEREIGN PRINCES of EUROPE.

Achmet IV. Grand Selgner	1733	Joseph Bon. Aug. Emp. Germ.	1742
Charles, King of Spain,	1716	Fred. William, King of Prussia,	1744
Pius VI. Pope	1717	Gustavus, King of Sweden,	1746
Victor Amadeus Maria, K. Sardinia	1726	William V. Stadholder,	1748
Catherine, Empress of Russia,	1729	Christian VII. K. of Denmark,	1749
Stanislaus Aug. King of Poland	1732	Ferdinand IV. King of Sicily,	1751
Maria, Queen of Portugal	1734	Leopold XVI. King of France	1754

First Quarter, 4th, 24m. past 4 altern.
Full Moon 11th, 46m. past 5 aftern.
Last Quarter, 18th, 39m. past 8 morn.
New Moon, 26th, 21m. past 6 morn.

Sun enters π
19d. oh. 38m.

1	Th	Circumcision	8	4	3	56	22	57	9	36	6
2	F			4		56		52	10	41	7
3	S			3		57		46	11	46	8
4	D	2 Sun. after Christmas		3		58		39	morn		9
5	M	Old Christmas Day		2		58		32	0	54	10
6	Th	Epiphany: Twelfth-day		1		59		25	2	4	11
7	W			0	4	0		17	3	14	12
8	Th	Lucian	7	59		1		9	4	25	13
9	F			58		2		0	5	30	14
10	S			57		3	21	51	6	26	15
11	D	1 Sun. after Epiphany		56		4		42	D rises	F	
12	M	Plow Mond. O. N. Yr's D.		55		5		32	5	42	17
13	Th	Hil. Cam. Term begins		54		6		21	7	8	18
14	W	Grf. Term begins		52		8		11	8	31	19
15	Th			51		9	20	59	9	53	20
16	F			50		10		48	11	13	21
17	S	Old Twelfth Day. [Pricca		49		11		36	morn		22
18	D	2 S. af. Ep. Q. Ch. b. d. k.		47		13		23	0	30	23
19	M			46		14		11	1	45	24
20	Th	Fabian. Hil. Ter. 1 return		45		15	19	58	2	55	25
21	W	Agnes		43		17		44	3	58	26
22	Th	Vincent		42		18		30	4	52	27
23	F	Hilary Term begins		40		20		16	5	38	28
24	S			39		21		1	6	17	29
25	D	3 S. af. Ep. Conv. St. Pau'		37		23	18	46	6	48	30
26	M			36		24		31	D sets	N	
27	Th	Pr. Aug. F. b. Hil. 2 return		34		26		16	6	14	2
28	W			33		27		0	7	17	3
29	Th			31		29	17	43	8	21	4
30	F	K. Cha. I. mart. 1649		29		31		27	9	25	5
31	S			28		32		10	10	32	6

Days	L. of D.		Day Inc.	D. breaks	Tw. ends		Sun East	Cl. bef. S.		7 Stars	So.	
1	7	52	0	8	5	59	6	1	4	41	4' 23"	8 a 42
6		58		14		57		3		43	6 39	20
11	8	8		24		53		7		46	8 42	7 58
16		20		36		49		11		50	10 29	37
21		34		50		44		16		54	12 0	16
26		48	1	4		38		22		58	13 11	6 55

4 February hath xxviii Days. 1789.

First Quarter, 3d, 25m. past 9 morn.
 Full Moon, 10th, 8m. past 4 morn.
 Last Quarter, 16th, 10m. past 10 night.
 New Moon, 25th, 14m. past 1 morn.

Sun enters ♋
 17d. 15h. 28m.

M	W	Sundays, Holydays, &c.	Sun rises	Sun sets	Sun's decl.	Dries & sets	D's Age
1	D	4 Sunday after Epiphany	7 26	4 34	16 53	11 24	7
2	M	Purif. or Candlemas-day	24	36	35	morn	8
3	Tu	Blase Hil. Term 3 return	23	37	18	0 4	9
4	W		21	39	15 59	1 56	10
5	Th	Agatha	19	41	41	3 4	11
6	F		17	43	23	4 4	12
7	S		15	45	4	4 55	13
8	D	Septuagesima Sunday	14	46	14 45	5 39	14
9	M	Hilary Term 4th return	12	48	25	6 14	15
10	Tu		10	50	0	Dries	F
11	W		8	52	13 46	7 a 18	17
12	Th	Hilary Term ends	6	54	26	8 43	18
13	F	Old Candlemas day	4	56	6	10 4	19
14	S	Kalentine	3	57	12 45	11 22	20
15	D	Cexagesima Sunday	1	59	25	morn	21
16	M		6 59	5	1 4	0 38	22
17	Tu		57	3	11 43	1 44	23
18	W		55	5	21	2 44	24
19	Th		53	7	0	3 34	25
20	F		51	9	10 38	4 14	26
21	S		49	11	17	4 4	27
22	D	Quinq. or Shrove Sun.	47	13	9 55	5 16	28
23	M		45	15	33	5 41	29
24	Tu	St. Matthi. Shro. Tues. Pr.	43	17	11	6	30
25	W	Ash Wedn. [Ad. Fred. b.	41	19	8 48	D. sets	N
26	Th		39	21	26	7 a 18	2
27	F		38	22	3	8 25	3
28	S		36	24	7 40	9 32	4

Days	L. of D.	Day Inc.	D. breaks	Tw. ends	Sun. half	Cl. bef. S.	Stars So.	
1	9	8	1 24	5 30	6 30	5 4	14 10"	6 a 31
6		26	42	22 38	9	36		10
11		44	2 0	14 46	15	41		50
16	10	2	18	6 55	21	47		31
21		22	38	4 57	7 4	27	10 56	12
26		42	58	48	13	33	10	4 53

First Quarter, 4th, 5¹m. past 10 night.
 Full Moon, 11th, 5⁰m. past 1 aftern. Sun enters ♉
 Last Quarter, 18^h, 15^m. past 2 aftern. 19^d. 15^h. 53^m.
 New Moon, 26th, 46^m. past 6 aftern.

1	D	1 Sun. in Lent	David 6	34	5	26	7	13	10	a	39	5
2	M	Chad		32		28	6	55	11		48	6
3	Tu			30		30		32	morn			7
4	W	Ember Week		28		32		9			54	8
5	Th			26		34	5	45	1		53	9
6	F			24		36		22	2		46	10
7	S	Perpetua		22		38	4	59	3		35	11
8	D	2 Sunday in Lent		20		40		35	4		10	12
9	M			18		42		72	4		42	13
10	Tu			16		44	3	48	5		11	14
11	W			14		46		25	Dries		F	
12	Th	Gregory		12		48		1	7	a	39	16
13	F			10		50	2	38	9		0	17
14	S			8		52		14	10		19	18
15	D	3 Sunday in Lent		6		54	1	50	11		33	19
16	M			4		56		2	morn			20
17	Tu	St. Patrick		2		58		3	0		38	21
18	W	Edw. K. of W. Saxons		0	6	00		39	1		32	22
19	Th			5	58	2		16	2		10	23
20	F			56		40	n	8	2		55	24
21	S	Benedict		54		6		32	3		26	25
22	D	Midlent Sunday		52		8		55	3		50	26
23	M			50		10	1	19	4		13	27
24	Tu			48		12		43	4		3	28
25	W	Annunc. or Lady Day		46		14	2	6	4		5	29
26	Th			44		16		30	D	let	N	
27	F			42		18		53	7	a	31	30
28	S			40		20	3	17	8		39	31
29	D	5 Sunday in Lent		38		22		45	9		52	4
30	M			36		24	4	3	10		54	5
31	Tu			34		26		26	11		56	6

Days	L. of D. Day Inc.		D. breaks		Tw. ends		Sun East		Cl. bef. S.		7 Stars So.			
1	10	52	3	8	4	43	7	18	5	37	12	35	4	42
6	11	12		28		32		29		43	11	27		24
11		32		48		21		40		49	10	8		16
16		52	4	8		11		50		55	8	43	3	47
21	12	12		28		0	8	1	6	2	7	2		29
26		32		48	3	48		12		8	5	29		11

First Quarter, 3d, 30.m. past 8 morn.
 Full Moon, 9th, 24th, past 11 night.
 Last Quarter, 17th, 50m. past 7 morn.
 New Moon, 25th, 57m. past 9 morn.

Sun enters 8
 19d. 4h. 38m.

1	W		5	32	6	28	4h 49	morn	7		
2	Th			30		30	5	12	0	51	8
3	F	Richard. Cam. Ter. ends		28		32		35	1	38	9
4	S	St. Ambrose. Orf. T. ends		26		34		58	4	16	10
5	T	Palm Sun. Old Lady day		24		36	6	21	2	50	11
6	M			22		38		44	3	19	12
7	Th			20		40	7	6	3	45	13
8	W			18		42		28	4	10	14
9	Th	Munday <i>Thursday</i>		17		43		51		Drises	F
10	F	Good Friday		15		45	8	13	7	58	16
11	S			13		47		35	9	16	17
12	T	Easter Day		11		49		57	10	26	18
13	M	Easter Monday		9		51	9	18	11	28	19
14	Th	Easter Tuesday		7		53		40		morn	20
15	W			5		55	10	1	0	19	21
16	Th			3		57		22	1	0	22
17	F			1		59		43	1	33	23
18	S		4	59	7	1	11	4	2	0	24
19	T	Low Sunday. <i>Spurge</i>		57		3		25	2	24	25
20	M			56		4		46	2	46	26
21	Th			54		6	12	6	3	5	27
22	W	Orf. and Cam. T. begins		52		8		26	9	24	28
23	Th	St. George.		50		10		46	3	45	29
24	F			48		12	13	6	4	6	30
25	S	St. Mark, Prs. Maryb. 1776		46		14		25	3	fets	N
26	T	2 Sunday after Easter		45		15		44	8	50	2
27	M	Easter Term 1 return		43		17	14	4	9	56	3
28	Th			41		19		22	10	53	4
29	W	Easter Term begins		39		21		47	11	49	5
30	Th			37		23		59		morn	6

Days	L. or D.	Day inc.	D. breaks	Tw. ends	Sun East	Cl. bef. S.	7 Stars So.							
1	12	56	5	12	3	33	8	28	6	15	3	48	2	49
6	13	16		32		20		41		21	2	18		31
11		34		50		6		55		27	0	53		12
16		54	6	10	2	54	9	7		33	0	24	1	34
21	14	12		28		40		21		39	1	31		35
26		30		46		23		38		45	2	27		16

First Quarter, 2d, 2m. past 3 aftern.
 Full Moon, 9th, 23m. past 9 morn.
 Last Quarter, 17th, 44m. past 1 morn.
 New Moon, 24th, 20m. past 10 night.
 First Quarter 31st, 44m. past 7 night.

Sun enters II
 zod. 5h. 13m.

1	F	St. Philip & James	4	36	7	24	15	17	0	23	7
2	S	[of the Cross]		34	26	35	0	57			8
3	D	St. aft. Easter. Invention		32	28	53	1	47			9
4	M	Easter Term 2 return		31	29	16	1	53			10
5	Tu			29	31	27	2	47			11
6	W	John Ev. ante Port. Lat.		27	33	44	2	42			12
7	Th			25	35	57	3	37			13
8	F			24	36		3	37			14
9	S			22	38	33			Drises		15
10	D	4 Sunday after Easter		21	39	48	0	17			16
11	M	Easter Term 3 return		19	41	58	1	10			17
12	Tu	Old May Day		18	42	19	10	56			18
13	W			16	44	33	11	35			19
14	Th			14	46	48			morn		20
15	F			13	47	19	2	0			21
16	S			12	48	16	0	20			22
17	D	Rogation Sunday		10	50	29	0	31			23
18	M	Easter Term 4 return		9	51	42	1	10			24
19	Tu	Queen Char. born Durban		7	53	55	1	30			25
20	W			6	54	40	8	1	30		26
21	Th	Ascension or Holy Thurs.		5	55	20	6	12			27
22	F	Pra. Eliz. b. Easter Term		3	57	32	8	16			28
23	S	[5 return]		2	58	43	3	4			29
24	D	Sunday after Ascension		1	59	54	3	5			30
25	M	Easter Term ends		0	8	0	21	5	8	2	31
26	Tu	Augustin 1st Abp. Cant.	3	58	2	15	9	39			3
27	W	Venerable Bede		57	3	25	10	23			4
28	Th	Trif. Term ends		56	4	35	10	15			5
29	F	K. Cha. II. Restored 1660		55	5	44	11	30			6
30	S			54	6	53	11	57			7
31	D	Whit Sunday		53	7	22	1	morn			8

Days	L. of D.	Day Inc.	D. breaks	Tw. ends	Sun East	Cl. aft. S.	7 Stars	86.						
1	14	43	7	4	2	4	9	58	6	50	3	11	0	57
6	15	6		22	1	50	10	72		55		42		38
11		22		38		28		34	7	50		58		39
16		36		54		4		59		4	4	0	11	39
21		50	8	2	0	24	11	41		8	3	43		40
26	16	4		32	No real Night					72		21		20

Full Moon, 7th, 17m. past 8 night.
 Last Quarter, 15th, 5m. past 7 night.
 New Moon, 23d, 5m. past 8 morn.
 First Quarter, 29th, 16m. past 12 night.

Sun enters 23
 20d. 13h. 55m.

1	M	Whit Monday	Nicomede	5	52	8	22	10	21	9
2	Tu	Whit Tuesday		5	51	9	17	0	46	10
3	W	Ember Week		5	51	9	22	1	29	11
4	Th	K. Geo. III. b. 1738.		5	50	10	32	1	36	12
5	F	Pr. Er. Aug. b. 1771. Bonif.		4	49	11	38	2	7	13
6	S			4	48	12	44	2	43	14
7	D	Trinity Sunday		4	48	12	50	D rises	F	
8	M	Trin. Term 1 return		4	47	13	55	8 a	47	16
9	Tu			4	46	14	23	0	9	29
10	W	Ort. Term begins		4	46	14	5	19	0	18
11	Th	St. Barnabas. Corp. Chris		4	45	15	9	10	29	19
12	F	Trinity Term begins		4	45	15	13	10	52	20
13	S			4	44	16	16	11	12	21
14	D	1 Sunday after Trinity		4	44	16	19	11	31	22
15	M	Trin. Term. 2 return		4	44	16	21	11	50	23
16	Tu			4	43	17	24	morn	24	
17	W	St. Alban					25	0	10	25
18	Th						2	0	33	26
19	F						27	0	59	27
20	S	Transf. Edw. K. W. Sax.					28	1	30	28
21	D	2 Sun. aft. Trin. L. Day					28	2	9	29
22	M	Trin. Term 3 return					27	2	158	30
23	Tu						27	D sets	N	
24	W	Nativ. of St. J. Bapt. Midf.					25	8 a	50	2
25	Th						24	9	28	3
26	F						22	9	56	4
27	S						19	10	21	5
28	D	3 Sun. after Trin.					17	10	45	6
29	M	St. Peter. Trin T. 4 return					13	11	9	7
30	T						10	11	34	8

Longest Day at Lond.
 is 16h. 34m. 4sec.
 allowing 9m. 16 sec.
 for refraction.

Days	L. of D.	Day Inc.	D. breaks	Tw. ends	Sun East	Cl. aft. S	7 Stars So.	
1	16	16	8	34	7	16	2' 35"	10 m 55.
6		24		52		18	1 45	35
11		30	9	8		19	0 49	15
16		34		22		20	0 14	9' 56
21		34		22		21	1 19	53
26		38	dec. 2			20	2 23	13

No night, but
 constant day
 or twilight.

Full Moon,	7th, 31m. past	8 morn.	
Last Quarter,	15th, 21m. past	11 morn.	San enters ♍
New Moon,	22d, 1m. past	4 aftern	22d. oh. 44m.
First Quarter,	29th, 20m. past	6 morn.	

1	W	Trinity Term ends	3	46	3	14	23	n 6	morn	9
2	Th	Visitation of Virgin Mary	46	14		1	0			10
3	F	Dog Days begin	47	13	22	56	0	37		11
4	S	Translation of St. Martin	4	1		51	1	18		12
5	D	4 S. aft. Trin. Old Midf. day	48	12		45	2	10		13
6	M		4	11		39	3	2		14
7	Tu	Thomas & Becket. Camb. C.	49	11		33	D	ices	F	
8	W		50	10		26	8	a 25		16
9	Th		51	9		19	8	5		17
10	F	Camb. Term ends	52	8		11	9	12		18
11	S		53	7		3	9	32		19
12	D	5 Sun. after Trin.	54	6	21	55	9	6		20
13	M	Oxford Act	55	5		40	10	13		21
14	Tu		56	4		37	10	31		22
15	W	Switbin	57	3		27	10	55		23
16	Th		58	2		17	11	26		24
17	F		59	1		7	11	58		25
18	S	Oxf. Term ends	4	0		20	57	morn		26
19	D	6 Sun. aft. Trinity	2	7	58	46	0	42		27
20	M	Margaret	3	57		34	1	3		28
21	Tu		4	56		23	2	42		29
22	W	Magdalen	5	55		11	D	lets	N	
23	Th		7	53	19	58	7	a 34		2
24	F		8	52		46	8	22		3
25	S	St. James	10	50		33	8	48		4
26	D	7 Sun. aft. Trin. St. Anne	11	49		19	9	11		5
27	M		12	48		6	9	37		6
28	Tu		14	46	18	54	10	6		7
29	W		15	45		38	10	38		8
30	Th		17	43		23	11	17		9
31	F		18	42		8	morn			10

Days	L. of D.	Day dec.	D. breaks	Tw. ends	Sun. E. ft	Cl. bef. S.	Stars So.
1	6 28	0 6			7 19	3. 23"	8 m 52
6	22	12			18	4 17	32
11	14	20	No real Night		15	5 1	11
16	4	30			12	34	7 53
21	15 52	42			9	56	31
26	38	56	0 52	11 4	5	6 3	11

Full Moon, 5th, 27m. past 10 night.
 Last Quarter, 14th, 5m. past 2 morn.
 New Moon, 20th, 18m. past 11 night.
 First Quarter, 27th, 14m. past 3 aftern.

Sun enters π
 22d. 7h. 3m.

1	S	Lammas Day	4	20	7	40	17	53	0	m	2	11
2	D	8 Sunday after Trinity		22		38		38	0	55		12
3	M			23		37		22	1	53		13
4	Tu			25		35		6	2	55		14
5	W			26		34	16	50	Drifts		F	
6	Th	Transfiguration		28		32		33	7	2	17	16
7	F	Prs. Amelia b. 1783. Name		30		30		16	7	38		17
8	S	[of Jesu.		31		29	15	59	7	58		18
9	D	9 Sunday after Trinity		33		27		42	8	17		19
10	M	St. Lawrence		35		25		24	8	38		20
11	Tu	Prs. Brunf. b. Dog D. c.		37		23		6	9		c	21
12	W	Pr. Wales b. O. Lam. day		38		22	14	48	9	10		22
13	Th			40		20		30	9	59		23
14	F			42		18		11	10	40		24
15	S	Assumption		44		16	13	53	11	26		25
16	D	10 Sun aft Trin. Duke of		45		15		33	morn			26
17	M	[lock born 1763		47		13		14	0	23		27
18	Tu			49		11	12	55	1	32		28
19	W			51		9		59	e	50		29
20	Th			53		7		15	D	feis	N	
21	F	Pr. Wm. Hen. b. 1765		54		6	11	55	6	a	50	2
22	S			56		4		35	7	18		3
23	D	11 Sunday after Trinity		58		2		15	7	44		4
24	M	St. Bartholomew	5	0		c	10	54	8	12		5
25	Tu			2	6	58		59	8	43		6
26	W			4		56		52	9	29		7
27	Th			6		54	9	51	10	7		8
28	F	St. Augustine		8		52		30	10	57		9
29	S	Beheading of John Baptist		9		51		9	11	53		10
30	D	12 Sunday after Trinity		11		49	8	47	morn			11
31	M			13		47		25	0	54		12

Day	L. of D.	Day dec.	D. breaks	Lw. on	Sun East	L. bet. S.	7	Stats	So	
1	15	20	1	14	10	34	7	0	5 53"	6 m 47
6		4		30		44	6	55	5 24	28
11	14	46		48	2	9	56	50	4 43	9
16		30	2	4		20	39	44	3 49	5 50
21		22		22		35	24	39	2 43	31

Full Moon, 4th, 7m. past 2 aftern.
 Last Quarter, 12th, 54m. past 2 aftern.
 New Moon, 19th, 6m. past 7 morn.
 First Quarter, 26th, 48m. past 3 morn.

Sun enters 22d. 3h. 28m.

1	Th	Giles	5	15	6	4	8	n	3	1	m	59	13
2	W	London burnt 1666		17		43	7	42	3	5		14	
3	Th			19		41		19	4	10		F	
4	F			21		39	6	57	2	11	16		
5	S			23		37		35	6	2	30	17	
6	D	13 Sunday after Trinity		25		35		13	6	52	18		
7	M	Enurebus		27		33	5	50	7	15	19		
8	Tu	Nativity of the V. Mary		29		31		27	7	39	20		
9	W			31		29		5	8	9	21		
10	Th			32		28	4	42	8	45	22		
11	F			34		26		40	9	22	23		
12	S			36		24	3	56	10	21	24		
13	D	14 Sunday after Trinity		38		22		33	11	25	25		
14	M	Holy-Cross		40		20		10	morn		26		
15	Tu			42		18	2	47	0	35	27		
16	W	Ember Week		44		16		24	1	52	28		
17	Th	Lambert		46		14		0	3	35	29		
18	F			48		12	1	37	4	38	30		
19	S			5		10		14	D	sets	N		
20	D	15 Sunday after Trinity		52		8	0	5	6	21	2		
21	M	St. Matthew		54		6		27	6	52	3		
22	Tu	K. Geo. III. crown. 1761		56		4		3	7	28	4		
23	W			58		2	0	20	8	10	5		
24	Th			0		0		44	9	0	6		
25	F			2		52	1	7	9	58	7		
26	S	St. Cyprian		4		50		30	0	57	8		
27	D	16 Sunday after Trinity		6		54		54	morn		9		
28	M			8		52	2	52	0	1	10		
29	Tu	St. Mich. Prs. Ch. A.M. b		10		50		4	1	7	11		
30	W	St. Jerome		12		48	3	4	2	12	12		

Days	L. o' D.	Day dec.	D. breaks	Tw. ends	sun East	Cl. air. S.	7 Stars Set
1	13-30	3 4	3 7	8 52	6 20	0 24	4 m 51
6	10	24	21	38	20	2 2	33
11	12 52	42	34	25	14	3 44	15
16	30	4 2	45	14	8	5 28	3 37
21	12	23	56	3	2	7 12	40
26	11 42	42	4 7	7 52	5 55	8 4	20

Full Moon, 4th, 5m. past 7 morn.
 Last Quarter, 12th, 37m. past 1 morn.
 New Moon, 18th, 19m. past 4 aftern.
 First Quarter, 25th, 8m. past 8 night.

Sun enters m
 22d. 11h. 24m.

1	Th	<i>Remigius</i>	6	14	5	40	3	27	3	17	13
2	F		16			44	5	14	4	21	14
3	S		18			42	4	14	5	25	15
4	D	17 Sunday after. Trin.	20			40	37		D	rises	16
5	M		22			38	5	0	5	25	17
6	Tu	<i>Faith</i>	24			35	2	25	6	22	18
7	W		26			34	4		6	55	19
8	Th		28			32	6	9	7	30	20
9	F	<i>St. Denis</i> Mic. Day	29			31	3		8	24	21
10	S	<i>Off. and Ca. T. b. [Old</i>	31			29	5		9	21	22
11	D	18 Sunday after Trin.	33			27	7	17	10	29	23
12	M		35			25	40		11	40	24
13	Tu	<i>Trans. of K. Edw. Conf.</i>	37			23	8	3	morn		25
14	W		39			21	25	0	59		26
15	Th		41			19	4	2	19		27
16	F		43			17	9	9	3	40	28
17	S	<i>Esbedred</i>	45			15	32	5	2		29
18	D	19 Sun. aft. Trin. St. Luke	47			13	53		D	sets	N
19	M		49			11	10	15	5	29	2
20	Tu		51			9	3	6	10		3
21	W		53			7	52	6	56		4
22	Th		55			5	11	19	7	51	5
23	F		56			4	4	8	52		6
24	S	[III. Accel.	58			2	12	1	9	56	7
25	D	20 Sun. af. Trin. K. Geo.	60			0	22	11	0		8
26	M	K. Geo. III. Procl. 1760	7	24	58	42		morn			9
27	Tu		4	57	13	2	0	6			10
28	W	St. Simon and Jude	6	54		23	1	12			11
29	Th		8	52		42	2	15			12
30	F		9	5	14	2	3	20			13
31	S		11	4		22	4				14

Days	Lat. of O.	Day dec	Breaks	1 w. ends	Sun East	Cl. aft. S.	Stars Se
1	11 32	5 2	4 18	7 41	5 49	10 32	3 m 4
6	12	22	29	30	43	12 2	2 46
11	10 54	40	39	20	37	13 22	27
16	34	6 0	49	10	31	14 28	8
21	14	20	59	0	25	15 20	1 50
26	0 56	38	5 8	6 51	19	15 56	29

Full Moon, 20, 12m. past 12 night.
 Last Quarter, 10th, 30m. past 10 morn.
 New Moon, 17th, 29m. past 3 morn.
 First Quarter, 24th, 42m. past 3 aftern.

Sun enters 21d. 7h. 37m.

1	D	1 Sun. af. Tr. All Saints	7	13	4	47	14	41	5m	30	15
2	M	Prince Edward b. <i>All Souls</i>		15		45	15	0	D rife		F
3	Tu	Prs. Soph. b. Mic. T. 1 ret.		17		43		19	5	21	17
4	W			18		42		37	5	38	18
5	Th	Powder Plot, 1605		20		40		55	6	25	19
6	F	Leonard. Mich. Ter. beg.		22		38	16	13	7	19	20
7	S	Duke of Cumb. b. 1745		24		36		31	8	21	21
8	D	22 S. af. T. Prs. A. So. b		25		35		48	9	32	22
9	M	Ld. Mayor's Day at Lond.		27		33	17	5	10	46	23
10	Tu			29		31		22	morn		24
11	W	St. Martin		30		30		39	0	3	25
12	Th	Mich. Term 2 return		32		28		55	1	21	26
13	F	<i>Britius</i>		33		27	18	11	2	41	27
14	S			35		25		26	4	1	28
15	D	23 Sun. aft. Tr. <i>Machatus</i>		37		23		42	5	22	29
16	M			38		22		57	6	40	30
17	Tu	Hugh Bp. of Lincoln		40		20	19	11	D sets		N
18	W	Mich. Term 3 return		41		19		26	5	34	2
19	Th			42		18		39	6	33	3
20	F	Edmund K. and M.		44		16		52	7	37	4
21	S	[Old Mart. day]		45		15	20	6	8	42	5
22	D	24 Sun. aft. Trin. Cecilia.		47		13		19	9	49	6
23	M	St. Clement		48		12		31	10	55	7
24	Tu			49		11		44	morn		8
25	W	D. Glou. b. Catharine. Mi.		51		9		55	0	0	9
26	Th	[Term 4 re.]		52		8	21	6	1	4	10
27	F			53		7		17	2	7	11
28	S	Mich. Term ends		54		6		28	3	11	12
29	D	Advent Sunday		5		5		38	4	16	13
30	M	St. Andrew		56		4		4	5	21	14

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	9	34	7	0	5	17	6	42	5	12	16	14	1	m	4															
6		16		18		24		35		7		8		0	44															
11		0		34		32		28		1		40			24															
16	8	44		50		37		23	4	57		14	51		3															
21		30	8	4		43		17		52		13	40		11	42														
26		16		18		40		11		49		12	11		21															

Full Moon, 2d, 39m. past 4 aftern.
 Last Quarter, 9th, 17m. past 6 aftern.
 New Moon, 16th, 43m. past 4 aftern.
 First Quarter, 24th, 11m. past 1 aftern.

Sun enters 19
 zod. 19h. 59m.

1	Th		7	37	4	3	21	57	8m	26	15
2	W			58		2	22	60	3	rises	F
3	Tu			59		1	14	5	2	6	17
4	F		8	0		C	22	6		9	18
5	S			13	59		23	7		16	19
6	D	2 Sun. in Advent. <i>Nicholas</i>		2	58		36	8		29	20
7	M			3	57		47	9		44	21
8	Tu	<i>Conception of V. Mary</i>		3	57		47	11		2	22
9	W			4	56		55	morn			23
10	Th			5	55	23	0	0		18	24
11	F			5	55		9	1		37	25
12	S			6	54		10	2		53	26
13	D	3 Sunday in Advent. <i>Lacy</i>		6	54		13	7		11	27
14	M			7	53		17	5		24	28
15	Tu	[Term. ends		7	53		20	6		33	29
16	W	Ember Week <i>Sap. Cam.</i>		7	53		22	D	sets		N
17	Th	Off. Term ends		8	52		24	5	2	0	2
18	F						26	6		12	3
19	S						27	7		20	4
20	D	4 Sunday in Advent					28	8		26	5
21	M	<i>St. Thomas. Shortest Day</i>					28	9		32	6
22	Tu						28	10		36	7
23	W						27	11		39	8
24	Th	<i>Christmas Day</i>		8	52		26	morn			9
25	F	<i>St. Stephen</i>		7	53		24	0		43	10
26	S			7	53		22	1		45	11
27	D	<i>St. John. S. aft. Christ.</i>		7	53		19	2		51	12
28	M	<i>Holy Innocents</i>		6	54		16	3		55	13
29	Tu			6	54		12	5		0	14
30	W			6	54		8	5		56	15
31	Th	<i>Silvester</i>		5	55		4	6		49	16

Shortest D. at Lond.

is 7h. 44m. 17s.

allowing 9m. 5s.
 for refraction.

Days	L. of D.	Day dec.	D. break.	Tw. ends.	Sun last	Cl. aft. S.	7 Stars So.
1	8 6	8 28	5 54	6 0	4 45	10' 23"	11 a 0
6	7 56	38	56	4	43	8 20	10 38
11	50	44	58	2	41	6 5	16
16	46	48	0	0	40	3 39	9 54
21	44	50	1	5 59	39	1 9	32
26	46	52	0	6 0	40	1b. 21	10

CHRONOLOGICAL NOTES, &c. in 1789.

Dominical Letter	D	Roman Indiction	7	Easter Day	April 12
Golden Number	4	Septuag. Sun.	Feb 8	Ascension Day	May 21
Epaet	-	Shrove Sunday	Feb. 22	Whit-Sunday	May 31
Cycle of the Sun	6	Lent begins	Feb. 25	Advent-Sun.	Nov. 29

ECLIPSES, &c.

THERE will be four eclipses this year; two of the Sun, and two of the Moon.—I. The Moon is eclipsed May 9, invisible.—Begins 8h. 38m. in the morning; middle 9h. 31m. ends 10h. 24m. digits eclipsed 2° 54' on the C's north limb.—II. The Sun is eclipsed May 24, at 10h. 20 $\frac{1}{2}$ m. invisible. III. The Moon is eclipsed Nov. 2, visible; begins 11h. 28m. at night; middle 12h. 32m. end 1h. 37m. next morn. digits ecl. 3° 40' on the C's south limb. IV. The Sun is eclipsed Nov. 17, invisible. The conjunction at 3h. 29m. morning.

VENUS is a morning star till May 20; then an evening star to the end.

JUPITER is a morning star till Jan. 14, then an evening star till Aug. 2, then a morning Star.

There will also be a transit of the Planet Mercury this year, over the face of the Sun, on the 5th of Nov. in the afternoon. It begins at 1h. 10m. and ends at 6h. 4m.—*We refer to our Supplement for an account of such transits, with a type of the present one, as also a type of the visible eclipse of the Moon on the 2d of November.*—A COMET is also expected to appear about the beginning of the year.

ANSWERS to the ENIGMAS.

1 Fashion	4 Air	7 Envy	10 Ladies Diary
2 Bird nest	5 Echo	8 Night	11 Candle
3 Millstone	6 Fir-Tree	9 Smoke	12 or Prize, Fancy.

Answers to the Prize Enigma.

1. *Laura's Address to Mr. Robert Richardson, of Prosperity.*

And wilt thou, Richardson, dear long-lov'd name!
Arouse a-fresh my half-extinguish'd flame;
Command thy "tow'ring muse" from pole to pole,
And touch the string that shakes my inmost soul!
Fancy! lov'd, fatal theme! thy power alone
Bids drooping reason quit her tott'ring throne;
The exil'd senses mourn thy wayward sway,
And nature starts, yet owns she must obey.

Too cruel youth! yet blameless may'st thou shine;
Joy be thy portion, fell despair be mine!
Quixotic madness urg'd me to declare
The lov'd dear source of all my hope and care;
That declaration, and thy juster scorn,
Leave my sad heart with ev'ry passion torn.
Yet blame not, fair diarians, him whose eyes
Know not the wretch who thus in anguish sighs.
Farewell! I fly, an hapless love-lorn maid!
And ling'ring shrink behind oblivion's shade.

2. *Addressed to Mr. R. Richardson, by Mr. William Evans.*

Do thou, sweet bard, whose soaring genius can
 The mazy flights of fancy justly scan,
 Resume once more thy soft harmonious strain,
 To all the silent tribe of Dia's train;
 That wont to deck her page with branching bays,
 Their honour, and our admiration raise.

For I, with Mrs. Lean, exclaim and grieve,

* "They've ceas'd to write, ah have they ceas'd to live."

* See her general answers in 1784.

3. *Sylvanus's Address to Miss Nancy S—, who desired him to answer the P. E.*

Fancy never feign'd a face,	Not with all its necromancy,
Art could never shew such grace,	Charms so sweet as thine dear Nancy :
Yours alone can fill my Fancy.	

4. *The same answered by Mr. R. G. West.*

Phebus had ting'd the glowing east,	Taught by her song, my voice I'll raise,
The lark had left her mossy nest,	In grateful hymns of sacred praise,
And soaring reach'd the sky;	To heav'n's almighty king.
So sweet the tun'd her matin lay,	Up then, my soul, with seraphs join,
That fancy whisp'ring seem'd to say,	Extol his mighty power divine,
She joins the choir on high.	Who gave thee voice to sing.

5. *Mira's Despair.*

Mentor is gone! my guardian, lover, friend;
 Nor time nor chance can the lov'd youth restore.
 Ye pleasing *Visions*, now you're at an end,
 For I must see his angel form no more.

6. *The Answer by Mr. George Lodge, of Linton.*

How blest the man whose thoughts need no disguise;
 His practice virtue, endless bliss his prize.

7. *By Miss Eliza Dillotson, of Harskeath, near Linton.*

How blest the humble mind when wrapt in thought,
 Of what to man the greatest comfort brings;
 How with his blood, Christ our redemption wrought,
 And seal'd our pardon with the king of kings.

8. *By Master John Pytches, of Linton Academy.*

Happy the bard whose skill is here display'd,
 Veiling his fancy thus in masquerade.

9. *By Mr. Matthew Jackson, of Towersey, Bucks.*

"Of all the various ills that men lament,
 How few are those which care might not prevent!"
 Nor vain the precept; by experience taught,
 Too late we learn, they spring from want of thought.

10. *By Mr. Robert Allanson, of Middleton, Yorkshire.*

Long time I study'd to unfold the prize,
 So well conceal'd, and hid in dark disguise.
 On downy pinions fancy took her flight,
 And brought the latent object into sight.

11. *By Mr. Tho. Nield, Writing Master, of Hawarden School.*

With *musing* thoughts profound I scan'd your prize;
And *Fancy's* self came strait before my eyes.

12. *The same answered in an Epigram, by Mr. T. W. Leicester.*

Two juvenile poets, at Bacchus's shrine,
Imagining wit was enliven'd by wine,
Too freely had tipped the stores of the barrel,
And with stigmas thrown out had near come to a quarrel.
Says one, when you with your stiff verses to shine,
You haste to some author, and there crib a line:
But you, says the other, for want of instruction,
Not content with a line, steal all his production.

GENERAL ANSWERS to the ENIGMAS.

1. *On Winter; by Mr. Rob. Allanson, of Middleton, Yorkshire.*

Adieu, to flow'ry meads and groves,
To rural scenes, and gay alcoves;
No more the birds their *nests* prepare,
Nor fill with harmony the *air*,
The lily and the fragrant rose
Their beauties now no more disclose;
These pleasing prospects disappear,
And winter *nights* are now severe,
Rude tempests *echo* thro' the plains,
And bind the *mill* in icy chains.
No more the rural nymphs are seen
To trip along the verdant green,
Nor harmless shepherds in the grove
Are heard to sing soft tales of love;

But to the village they retire,
Where, seated round the chearful *fire*,
They pass their time in sweet content,
Read *Lady Di*, and *Supplement*.
Such *matchless* concord they possess,
That scandal dreads to shew her face,
And *envy's* banish'd from the place.
No *fancy'd fashions* ere perplex,
Or prompt the minds of either sex.
Thus with content the minutes pass,
While each blith swain surveys his
 lafs,
His pipe he *smokes*, and drinks his
 glaf.

2. *The LADIES DIARY, or Journal of a Day, by Miss Sally Browne.*

First in the morning, when I *wake*,
It is my constant care,
To dedicate my soul to God,
In supplicating pray'r.

Imploring his efficient grace
To guide me through the day;
To keep my *thoughts* and steps a-
 right,

Throughout the devious way.

My morning orisons perform'd,
I then an *airing* take,
Far as yon *mill*, or yonder *grove*,
Where *envy* dare not wait.

Returning home with mind enlarg'd,
On Providence reflect;
Whose finger taught the birds to build,
Their *nestlings* to protect.

The scaly tribe, the rav'nous beast,
Thou, Lord, provid'st for all!
And says, without thy knowledge, not
One sparrow ere doth fall.

The day advancing, I advance,
And constantly employ
The *busy needle* to its task;
Which yields me double joy.

No *noisy smoker* ere intrudes
Upon my happy time;
Nor booby 'squire, by father sent,
With, 'Mifs—will—you—be—
 mine.'

The *night* arriv'd, I finish it,
As I began the day;
'Knowing the *fashion* of the world
Is gliding swift away.'

3. *Lucy's Downfall; by Miss Alexia Corney.**

No more I hail the rosy morn,
 Or twine the flow'ry wreath;
 For Lucy, from my bosom torn,
 Is in the arms of death.
 Alas! poor Lucy, hapless maid,
 Thou sigh'd, but sigh'd in vain,
 And 'neath the *fir-tree's* spreading
 Did to the *air* complain. [shade,
 Deceitful Damon won her heart;
 She *fancy'd* him sincere;
 She *envy'd* not the rich or great,
 Damon was all to her.
 Till vain of conquest, foolish youth,
 By pride too surely won,
 Forgot his vows and oaths of truth,
 And Lucy was undone.
 One *eve*, as late we fought the grove,
 Her eyes began to flow,

Her throbbing breast heav'd sighs of
 And *echo* mock'd her woe. [love.
 'Behold, she cry'd, the *smoking* cot,
 Beside yon clacking *mill*,
 Where first he told his pleasing tale,
 Nor dreamt I then of ill.
 I *dress'd* myself with nicest art,
 To please the charming swain;
 His smiles beguill'd my flut'ring
 The cause of all my pain. [heart,
 Alas! fond youth, thy broken vows
 I ever must repeat,
 And mourn beneath the shady boughs,
 Where tuneful *nestlings* meet.
 Excuse, *Diarian* friends, the maid
 Who strives the tale to tell,
 How Lucy shone as *candle* bright,
 But, ah! too soon she fell.

* *The Author thanks this ingenious young Lady for her amusing little anecdote, to the subject of which he heartily wishes a happy success.*

4. *The same, answered by Mr. Thomas Eland.*

Dear Di, my painful cause support,
 Say, shall I leave, or shall I court,
 The false bewitching Smales:
 Once she had flattering *thoughts* of me,
 And sigh'd and wish'd my face to see,
 But ah! how chang'd her tales.
 Now by a youth and *dress* inspir'd
 She flies from me she once admir'd,
 Nay once resign'd her hand;
 With *smoke* her words may well compare,
 These lost in *sound*, and that in *air*,
 Or letters wrote on sand.
 Oh! cruel maid, why thus forsake
 The youth who only lives to make
 You happy all your life;
 Snug in some little country *nest*,
 How wou'd my days and *nights* be
 blest'd,
 Could I but call you wife.

Must I forsake you then?—I must;
 My muse, provok'd, cries out 'tis just;
 Forget you then I will:
 My suit in future shall be paid
 To some more faithful constant maid,
 Some 'Patty of the *Mill*.'
 You with your swain, I with my
 lass,
 Together trip the verdant grass,
 Or rest beneath the shade;
 Where lofty *fir*, and spreading oak,
 Wou'd see us toy, and hear us joke,
 And hide the blushing maid.
 Scandal with us shou'd have no place,
 But baleful *envy* hide her face,
 And joy inspire each breast;
 Each *evening* too in peace we'd
 spend,
 Till wasting *candle's* near its end,
 Then calmly sink to rest.

5. *The same answered by Maria.*

Far remote from crouded courts,
 Far from *fashion's* splendid seat,

Far from folly's gay resorts,
 Let me find a calm retreat.

Not a palace proudly swelling,
Nor a cot in deserts drear;
Let not *envy* eye the dwelling,
Nor contempt with frown severe.
Seated in a pleasant valley,
Where no city's *smoke* molest:
In the *fers* and bushes near me
Let the warblers build their nest.

Here a stream from yonder corn mill
Gently wind its course along.
There sweet *echo* from the hill
Kindly answer to my song.
When *night* draws her sable round me,
And *tapers* light supply the day,
Then let Gent's or Ladies Diary
Fancy's magic power display.

6. The same by Miss Betty Smales.

Let me wander up the hill,
Down the vale, or by the mill,
By the gentle falling floods,
Thro' the cool sequester'd woods,
New dress'd groves and bow'ry mazes,
And o'erhillocks deck'd with daisies;
Whilst the air on zephyr's wing,
Wasts the odours of the spring;
And the plowman whistling round,
Turns the reeking fallow ground;
And the shepherds wind their flutes,
And the virgins strike their lutes,
And the nestling warblers sing,
And responsive valleys ring:

Here unenvy'd let me dwell,
In some moss-grown rural cell;
And while pleasure melts the lay,
With the tuneful sisters play;
Nature thou hast charms for me,
This is true reality.—
Ye that revel thro' the night,
By the glimm'ring taper's light,
Fond of gay fantastic toys,
Pleas'd with visionary joys,
Would you taste of true content,
Give your mirth a supplement;
Come and share the bliss with me;
This is sweet reality.

7. The same answered by Mr. J. Walton, of Allen Town.

How sweetly *enchanting* is spring,
When nature enlivens the scene?
How pleasing each prospect in May,
When flow'rets enamel the green?
What's all the gay bustle of state,
Compar'd with the joys of the field,
Where health and contentment reside,
That true satisfaction can yield?
Then happy the man who obtains
These solid enjoyments of life,
Where peace with tranquility reigns,
And love that's unfully'd with strife.
No greater ambition he knows,
Than view the rich crops of his
ground,
While melody hovers in air,
And *echo* redoubles the sound.

At night honest Bess with a smile
Awaits the return of her mate,
Whom no gaudy ribbons adorn:
Unenvy'd's the pomp of the great.
His florid young offspring relate,
How down in the brake by the mill,
Such nestlings, and nests they had
found,
Along by the side of the hill.
While Bessy smokes over the floor,
And quick brings her best homely fare,
Her matches or candles she minds;
Her scanty repast is not rare.
No Diary riddles they mind,
Nor Editor's pleasing addres;
Their bible is solely their guide,
In virtue to finish their race.

8. Mr. Gradidge, of Canterbury, thus answers the same.

The shortest answer pleaseth best:
Then I'll pronounce that one's a Nest;
And *Fancy* says she knows some more,
Yes, *Echo* answers, half a score.

2
12
5
Come,

B 2

Come, <i>My</i> genius, then begin,	4
And tell them all ere <i>Night</i> set in:	8
But I am roving far at large,	
And quite forget <i>Diaria's</i> charge,	10
To make our answers short and pat,	
And not <i>Dress'd</i> up with this and that;	1
A long and tedious tale to tell,	
But all we answer, answer well:	
Then <i>Envy</i> not, nor think to blame,	7
The man who hunteth after fame,	
In bringing forth to public view,	
From <i>Fire</i> and <i>Smoke</i> , with scarce a clow,	6, 9
Both <i>Candles</i> , <i>Mills</i> , and all the rest,	11, 3
The shortest way,—perhaps the best.	

9. *On Spring; by Mr. Isaac Gumley, of Ansty, near Leicester.*

Once more we behold the sweet visage of spring,	
And winter is fled from our isle,	
The <i>Birds</i> round their new <i>Habitations</i> do sing,	2
And <i>Fashion</i> appears with a smile.	1
The streams that so lately were fetter'd in ice,	
Now flow in meanders along;	
The hills and the valleys all seem to rejoice,	
And nature is big with a song.	
Behold! how the lambkins now frolic around,	
The turtle-dove sweetly complains;	
Coy <i>Echo</i> repeats <i>Philomela's</i> soft sound,	5
And <i>Night</i> is chear'd up with her strains.	8
To breathe the fresh <i>Air</i> by the side of the <i>Mill</i> ,	4, 3
See Colin and Phillida rove,	
Or plac'd on the brow of a green sloping hill,	
Talk o'er the sweet pleasures of love.	
While thus to each other such raptures they give,	
Pale <i>Envy</i> around them may hiss,	7
Well <i>Matched</i> in wedlock, they'll happily live,	6
Nor <i>Supplement</i> need to their bliss.	10
From the bustle of crowds, and the <i>Smoke</i> of the town,	9
Ye lovers of wisdom retire;	
There, there all your <i>Dreams</i> of ambition lay down,	12
And nature's productions admire.	
The beauties of spring can more pleasures impart,	
Than <i>Candles</i> which glare at the ball;	11
They never corrupt, or embarrass the heart,	
But lead to the Maker of all.	

10. *A Sonnet, by Mr. William Evans.*

How gay were the scenes when I stray'd with my fair,	1
While <i>Fiora's</i> fair offspring perfum'd the <i>Air</i> ;	4
	From

From <i>Smoke</i> and from <i>clamour</i> how happily free,	9, 3
Nor <i>Envy</i> distressing or Molly or me.	7
The full-fledged <i>Nestling</i> was tuning her strain,	2
And harmony <i>echo'd</i> o'er valley and plain;	5
What nymph or what shepherd that roves o'er the lee,	
So <i>Matchless</i> as Molly, or happy as we.	6
While <i>Fancy</i> still cheering each far distant day,	12
Lights Hope's friendly <i>Torch</i> to illumine life's way,	11
And morning and <i>Night</i> in sweet concord agree,	8
To add to the pleasures of Molly and me.	

11. *May Morning*; by Mr. W. Weatherill, of York.

The sun, glorious <i>torch</i> , that lights up the day,	11
Has chas'd the gloomy shades of <i>Night</i> away;	8
On ev'ry gay-dress'd mead and flowing stream,	1
His radiant beams diffuse a golden gleam;	
The <i>birds</i> high perched on each cloud-capt tree,	2, 6
Make the groves <i>echo</i> with sweet melody.	5
As through the <i>Air</i> they dart from spray to spray,	4
Salute with blitheest notes the new-born day.	
The gentle breeze that turns the <i>Mill</i> -sails round,	3
Raises the balmy odours from the ground;	
The sweetest fragrance that the flowrets wear,	
It sheds around, and sweetens all the air.	
Leave, leave the <i>smoky</i> town, ye <i>learned</i> train,	9, 10
Haste, hither haste, where health and pleasure reign;	
Drive from your <i>Fancy</i> , <i>Envy</i> far away,	12, 7
And here with me admire the rising day.	

12. *The ENIGMAS answered by Wildecotienfis.*

The sun was just peeping, the morning was fair;	
To the fields with my Kitty to take the fresh <i>Air</i>	4
I hasted, and as we walk'd gently along,	
The lark from his <i>Nest</i> cheer'd the skies with his song:	2
What a beautiful prospect extended around!	
There a <i>Corn-Mill's</i> rough music the cliffs did <i>resound</i> :	3, 5
There a clump of tall <i>Firs</i> at a distance was seen,	6
And the <i>Smoke</i> from the villages vary'd the scene.	9
Thus pleas'd with our ramble we carelessly stray'd	
Nor <i>Envy</i> nor <i>Fashion</i> once enter'd our head;	7, 1
But <i>Fancying</i> thus that too far we should roam,	12
We resolv'd to return, and so jaunted it home.	
There refreshed, we feasted our minds with chit-chat,	
Talk'd of <i>Lady Diaria</i> , her mate, and all that,	10
Read o'er the enigmas and queries till <i>Night</i> ,	8
'Then found it was needful the <i>Candles</i> to light,	11

13. *The same, by Mr. William Bearcroft, of Nawton.*

Birdnest, echo, air, mill, fashion, and scandal,
Make half the enigmas if rightly they're guess'd;
Night, smoke, fancy, supplement, matches, and candle,
If I'm not mistaken, will answer the rest.

Many other solutions, with the names of all the other answerers, are inserted in the Supplement, pr. 6d. containing the same in quantity as the Diary, with accounts of eclipses, transits, and comets, &c. &c.

ANSWERS to the REBUSES and CHARADES.

Rebuses. 1 Cook, 2 Fox, 3 Wed, 4 Helen Latham, 5 Jane Gardener
Charades. 1 Eyeton, 2 Bridewell, 3 Lap-dog, 4 Breast-knot, 5 Starling,
6 Sunday.

1. *The Rebuses answered by Mr. Robert Allanfon.*

If Cook or Fox do e'er design to wed,
And take a partner to the bridal bed;
There's none more worthy 'mong the British fair,
Than Helen Latham, or Jane Gardener.

2. *On Captain Cook, by Mr. William Boyer, of Leyland Free School.*

Rest, glorious Cook, beneath thy dewy shade,
Till death's destruction's universal made:
Jane Gardener, Miss Latham, Fox, and all,
In turn, will join thee at kind nature's call.

3. *The Wedding, by Mr. John Burrow, of Bolton Field.*

<p>A dish to Cook, is my device 'Gainst Fox and Clayton wed; Of starlings, woodcocks, all that's nice, That can be caught or bred. For Latham and Jane Gardener, Bride maids they say will be,</p>	<p>Breast-knots on Sunday will appear, And Lap-dogs there you'll see. The parson the love knot will knit, And have them safely ty'd, And Clayton, tho' she be a wit, Will make a virtuous bride.</p>
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4. *The Rebuses answered by Mr. Philp Rusper.*

<p>If Cook or Fox incline To enter wedlock bands; At love and honour's shrine, Present your willing hands.</p>	<p>Jane Gardener, good and kind, With Helen Latham, too, And ev'ry virtuous mind, The same design pursue.</p>
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5. *The Charades answered by Amaris.*

<p>Should Eyeton chance to be a bride, Numbers would say 'tis well; Not yet, until the matter's try'd, There's none can justly tell. Tho' Starling's notes her voice excel, On Sunday she be grac'd</p>	<p>With breast-knot, or in palace dwell, And Lap-dog by her plac'd; Yet who can penetrate the mind, And view the secrets there? Deliberation ere we're join'd, Then ought to be our care,</p>
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6. *The Wife; answering the Charades, by I. E. Strephon.*

Let the Belles with fine *Breast-knots* go flaunt it along,
 Attended with *Lap-dog*, with flattery and throng,
 Be it mine with some fair such as *Eyeton* to prove
 The sweet satisfaction of conjugal love:
 And fearless of *Bridewell*, we'll jocosely stray,
 Where the thrush and the *starling* enliven each spray;
 And by virtue attracted to church still repair,
 Each *Sunday* to join with the pious in prayer.

7. *The same, by Philomath, of Rotherham.*

To you, ye lovely fair, these hints I send;
 Accept this admonition from a friend.
 Revere the *Sabbath*, holy keep the day,
 And to your great Creator reverence pay:
 Let no false swain in courtship e'er deceive
 With *Breast-knots*, nor his flatt'ring words believe;
 Though fair as *Eyeton*, you may, when too late,
 Repent in *Bridewell* your too cruel fate.
 Then as the *starling* chants her rural lays,
 So may you ever sing your Maker's praise.

ANSWERS to the QUERIES.

QUERY 1. *answered by Mr. Thomas Eland.*

The busy world, all day in arms,
 With sounds confus'd our ear alarms,
 Till nought distinct we hear:
 At night, the busy world laid by,
 The unmix'd sound will swiftly fly,
 And sweetly kiss the ear.

The same, by Mr. John Dalton, of Kendal.

In the night time, when the air is calm and nature is composed, sounds are fewer, and heard more distinctly, than in the day, when the air is frequently more agitated by winds, and a greater variety of sounds prevails, which prevent the mind from making so accurate a discrimination of them, as in the other case. Add to this, that probably the mind may be more attentive than ordinary to ideas of sound at that time, when the faculty of vision is in a great measure suspended for want of light.

QUERY 2. *answered by Mr. James Williams, of Colyton.*

The sound is caused by the small bubbles which are continually rising from the bottom; and it is more distinctly heard in the tea-kettle, than in any other vessel, on account of its globular form: while the bubbles ascend singly, the steady sound continues; but when the water becomes so hot, that several unite together, and ascend as it were in flakes, ebullition commences. There have been various opinions concerning these bubbles: Professor Hamilton, in his ingenious theory of vapours, *Philos. Trans.* vol. 55, endeavours to prove, that they are formed by elastic steam: and it is well known,

known, that when the steam is let out of the boiler of a steam engine, into the open air, it causes a very loud roaring noise.

The same, by Mr. I. Croshey, at Peasehulam Green, Yorkshire.

The sibilation or finging of the tea-kettle, is caused by the bubbles of air, being driven through the water (with a rapid motion) by the particles of fire, and dashing the said water against the hot concave sides of the vessel, and so causing the noise.

QUERY 3. answered by W. H. Hall, Esq. Barrister at Law.

In some cases where divorces more easily obtained, it would tend to be serviceable to the state:—but, in other cases, a scandalous abuse of the rights of marriage.—I apprehend, the only answer that can be given with propriety to this query, is founded on two non-existing principles in the doctrine of civil society, namely, 1. An exemplary punishment annexed to the proofs in the first instance. — 2. A prohibition of instituting suits in ecclesiastical courts unless warranted by real proofs.—Were these considerations attended to, divorces would no doubt be salutary to the health of the nation; but, until those regulations take place, the methods of obtaining those dispensations are liable to the grossest abuse; for a virtuous wife may be brought under the denomination of a harlot, if her husband be base enough to prefer a suit against her, as the present state of the laws of divorce abounds in errors.

The same, by Mr. John Dalton.

It seems unlikely that the marriage state would be rendered happier, were divorces much more easily to be obtained: For, the condition of the female sex in general would evidently be greatly depressed by it, without any equivalent advantage to the other sex; as is the case in most uncivilized countries, where haughty tyranny, united with abject submission, affords few instances of that conjugal felicity, which is only to be obtained from mutual love and esteem. In short, any thing that has a tendency to lessen the dignity of the fair sex, in my opinion, is unlikely to encrease the happiness of the marriage state.

The same, by Mr. Alexander Rowe.

It is a general maxim, that when any thing can be easily obtained, the thing itself will be but little desired. Therefore make the obtaining of divorces easy, and they will rarely be regarded or attended to, and consequently it would contribute to the happiness of the married state.

QUERY 4. answered by Mr. James Williams.

Mr. Ray, in his 'Wisdom of God in the Creation,' has these words: 'Those animals, when young and little, finding in the stone some small hole reaching to the middle of it, might, as their nature is, creep into it as a fit *latibulum* for the winter, and grow there too big to return back by the passage by which they entered; and so continue imprisoned therein for many years; a little air, by reason of the coldness of the creature, and its lying torpid there, sufficing it for respiration, and the humour of the stone, by reason it lay immoveable and spent not, for nourishment.' This seems to be possible, and is the best solution I know of,

The same, by Mr. J. Walton, of Allen Town.

As there are no proofs of a spontaneous generation of animals, we may conclude, that either the young toad or the semen must have fallen through the crevices of the stone or rock, into the place where it is found; and so have continued there so long that the crevices have nearly closed upon it, by reason of the growing quality of the stone. And as the dormouse and several other animals, are in a torpid state all the winter; so the toad might continue in that inactive state, requiring no food during that interval, more than those other animals.

QUERY 5, answered by Mr. John Dalton.

The temperature of the air, in clear, serene weather, as determined by the thermometer, is generally as follows: The greatest cold in the 24 hours, prevails at, or a little before sun rise; from thence till about two afternoon, the heat gradually increases, and afterwards gradually decreases till next morning: Which may be accounted for thus: The clear air affording a free passage for the sun's rays, like other transparent bodies, receives very little heat from them; of course then its heat must be chiefly derived from the surface of the earth, which being acted on by the sun's rays, will constantly communicate its heat to the adjacent air; so that as the surface gradually increases in heat from sun-rise till sometime afternoon, and then decreases in the same manner; so will the air also that is near it.

If the ingenious querist have frequently found it colder about sun-set than afterwards, he must have judged of the temperature from sensation, and not from a thermometer.

QUERY 6, answered by Mr. Wm. Bearcroft.

I think it may be said, without incurring the imputation of atheism, that no system of philosophy gives us either convincing or demonstrative proofs of the immortality of man. Perhaps metaphysics bids fairest to answer the conditions of the query.—Inferences may be drawn from anatomy, and even from botany; but every argument drawn from philosophy seems to be weak; and it is from inspiration only that we have convincing proofs of the immortality of man.

See the Supplement for many other answers to the Refuses, Queries, &c. and the list of acknowledgments, which there is not room for here.

NEW ENIGMAS.

I. ENIGMA 709, by Eugenio.

My parts, ye fair, divided lay,
Far from the genial warmth of day,
In colour differing, and in name—
These, man combin'd, and rais'd to
fame.

Now oft in station high I'm found
With gay companions rang'd around,
When (how unlike the sons of pride!)
Our lesser o'er the great preside,
Who, guided by their pigmy king,
Obedient mount aloft and sing.
But when (as sometimes is the case)
In rural sports we find a place,

There none pre-eminence can boast;
And ah! our lofty station's lost.
Yet ev'ry nymph, and ev'ry swain,
Hears with delight our artless strain.
When the gay sons of Bacchus join
To pour libations at his shrine,
Oft to my friendly aid they fly,
Their wild excesses to supply.
Yet I (tho' strange it may appear)
With serious warnings strike their ear,
And shew—but that I must conceal,
Lest I destroy enigma's veil.

II. ENIGMA

II. ENIGMA 710, by Mr. George Beck.

Stand forth ye daring sons of art,
 And take a brother-brush's part;
 Who on Parnassus ne'er refuses,
 To form a mansion for the muses:
 For on that hallow'd hill I dwell,
 And visit ev'ry gloomy cell.—
 Swift when th' impetuous god inspires,
 My fingers sweep the trembling wires;
 And at the nod of mortal men,
 I guide, or seem to guide the pen.
 My feet, more limsy than a spider's,
 Oft bear a horse and two fat riders:
 Yea old and young, and belles and
 beaux,
 Heedless tread my tender toes.—
 I oftimes by the moon's pale lamp,
 O'er the meads and marshes damp,
 Or on the glittering streamlets wander,
 And seem a grey goose, or a gander;

Or, furious like a spectre grim,
 O'er the raging ocean skim,
 Untill I sweep some rampart high,
 And rear my head into the sky.—
 Of yore, in dread tremendous state,
 I in the very centre sate
 Of wild confusion's blank domain,
 And held an unmolested reign;
 Until some mighty voice that spake
 Bid ev'ry nerve of chaos break;
 Bid jarring atoms cease their strife,
 And worlds unnumber'd launch to
 life:
 'Twas then I took my instant birth,
 And fell down flat upon the earth.
 In this new state, ev'n whilst a minor,
 I was a rapid bold designer,
 Who, in the twinkling of an eye,
 Ap'd ev'ry soul that durst stand by.

III. ENIGMA 711, by Drytoast,

Pretty masters and misses, your servant is come,
 To dance you a jig to the tap of the drum;
 To the tap of the drum, or the harp's softer twang,
 To divert and amuse you I'll do all I can:
 Like an Andrew or Harlequin tumble and jump
 With ease o'er your heads, and pitch on my rump;
 Now balance in air, now fall, and now rise,
 With a hundred such frolicks, that please and surprize;
 From the East to the West, and back again bound,
 And sailor-like box you the compass all round.
 With thump upon thump, and stroke upon stroke,
 The patience of Job quite enough to provoke;
 Yet for all this rough treatment I never will tire,
 While the music is playing, tho' I've nought for my hire,
 When the drum or the harp their music give o'er,
 As a stone or a block I lie on the floor;
 Altho' I'm so active and frisk it about,
 And foot it, and turn it, and make such a rout.—
 In form I'm a monster; no head, leg, or arm;
 From four to twelve wings, to secure me from harm;
 With a body, dear misses, in shape like a thimble,
 That hops, skips, and jumps, and makes me so nimble.
 For my wings, to the birds indebted I stand;
 For my body, to trees brought from some foreign land;
 And whenever my maker would have me look smirken,
 A skin of some beast is my waistcoat or jerken;

Tho'

Tho' most times I'm naked, and jig it in buff—
 But hold, pretty masters, I've sure said enough
 Of my person, and anticks—and now tell me whether
 I'm as heavy as lead, or as light as a feather.

IV. ENIGMA 712, by Kit Went,

In *Spring*, dear ladies, I keep company
 With that sweet nymph, yclept Euphrosyne;
 Nay, am in favour with the Graces three.
 With fair Urania I'm a welcome guest,
 In rapture she will press me to her breast,
 While in her arms inclos'd I sink to rest.

In *Summer*, with fair Flora I am seen,
 In dress resplendent, cloath'd in liv'ry green;
 For in her service I have ever been:
 On her attend in each sequester'd grove,
 Where feather'd songsters warble forth their love,
 Frequent with her in sweet retirement rove.

When sweet *Pomona*, flush'd with Flora's reign,
 Descending, deigns to bless the fruitful plain,
 The goddess marks me second in her train.
 'Tis then in orchards, I with freedom stray,
 Through groves of fruit-trees elegantly gay;
 And thus, in pleasure's round, I pass the day.

But where stern *Winter* reigns,—oh horrid sound!
 Plac'd in a circle, to its centre bound,
 In dire despair, I'm fixed in the ground:
 Thus to my prison dragged like a slave,
 Void of all pleasing hopes, no one to save,
 In silent tears at last drop in the grave.

Now ladies fair, should you unfold my name,
 You cannot possibly raise me to fame,
 Tho' to a crown I justly lay my claim;
 First in, what's term'd rebellion, do appear,
 With armed troops, with target, sword and spear,
 Yet from all bloodshed, guilt, and blame am clear.

V. ENIGMA 713, by Quis.

I great assistance give to all mankind;
 Search thro' these lines, and you my name may find.
 A friend I have of constant use to me;
 But I the active am, the passive he.
 Alone, our talents cannot be display'd;
 Without the other, each is useless made.—
 Now, in the maze I wander too and fro;
 And act by contraries where'er I go;
 And, like the wife of old Laertes son,
 Now act, now counteract the work I've done,

I can unravel mysteries ; and, with care
 Things in obscurity, make plain appear.
 Without my special aid you try in vain,
 The rebus or enigma to explain.—
 Now I have surely said enough to tell
 What, tho' a while conceal'd, you know so well.

VI. ENIGMA 714, *by Miss Louisa Harper,*

In me a fav'rite guardian you behold,
 Priz'd as protector both of young and old.
 Two mighty powers I oftentimes defy,
 If summer glows, or winter storms are nigh.
 When eastern kings appear in splendid state,
 Amidst their train I wear a look elate;
 To guard the monarch from a foe I dare,
 And brave his fury with undaunted air.
 But this great service o'er, my pride is fled,
 I'm thrown aside—abash'd I droop'd my head.
 In Albion's isle, scarce forty years ago,
 I ne'er appear'd, but in some dismal show;
 In gloomy church-yards, then with clumsy mien,
 To wait on priests throughout the fun'ral scene;
 Whilst beating rain and blust'ring wind wou'd tear
 Ev'n the rough habit my poor frame did wear.
 But now each rank, each sex, do greatly me caress;
 And most weeks seen in various sorts of dress.
 Not spring's fair meads more lively tints display,
 Than those my spreading crest full oft array.—
 Ladies, my name I'm sure you'll now declare,
 To shield your beauty is my frequent care.

VII. ENIGMA 715, *by Mr. Wm. Francis, Master of Hook Academy.*

Tho' a rogue we oft hide, a frail nymph oft conceal,
 Too hastily do not abuse us:
 The honest and brave may the want of us feel,
 Nor their hands will chaste virgins refuse us.
 When far from his station the centinel's found,
 If he's ty'd up and flogg'd, 'tis not odd;
 Tho' we move not two yards from our posts, we are bound,
 And we cannot escape from the rod.
 Each single remains, yet our rings we all wear,
 Those ensigns of females who wed.
 No offspring we have, yet believe me, ye fair,
 We are all in our turns brought to bed.
 Kings, lords, and plebeans, with warmth we protect:
 Good actions too oft, are forgot!
 Our services surely you'll think they neglect,
 To be hung, drawn, and quarter'd's our lot.

VIII. ENIGMA

VIII. ENIGMA 716, *by Miss Betty Smalton.*

In gay appearance I am always seen ;
 With humming insects skim the verdant green ;
 With bird and beast I'm found, with man and woman,
 And help to save when danger comes upon 'em.
 I of this earth compose the greatest part,
 And stand display'd the centre of the heart.
 For me, the warblers swell their downy throats ;
 For me, soft music pours her dulcet notes ;
 With fond delight I meet the voice of love,
 And aid young Damon's whispers in the grove.

IX. ENIGMA 717, *by Mr. T. E. Leicesters.*

In Eden's garden first my birth I date,
 And was 'fore Adam and his loving mate,
 In those blis't realms where aromatic flow'rs
 Diffuse their sweets, enliv'ning myrtle bowers.
 Where innocence decreed to raise her throne,
 In vest transparent as the starry zone,
 With them I shar'd the great indulgence giv'n,
 With them the wrath of injur'd angry heav'n,
 When they with dire transgressions disobey'd
 Th' Almighty's word, and forfeited his aid :
 Then I with them was banish'd paradise,
 Expel'd by justice, wisdom's scourge for vice.
 How hard my lot, when through me they had breath,
 That in return with them I suffer death.
 Yet I the fallen race do still attend,
 To be to them both ornament and friend.—
 The shepherd swain, who hastes to yonder grove,
 His bosom fir'd with warmest thoughts of love,
 To meet his nymph while zephyrs wave each spray,
 I am his guide, and foremost lead the way ;
 And when with joy he gives the rapturous ki's,
 I'm near, to share the sweet extatic bli's.—
 But hark ! methinks I hear the neighing steed,
 Nor hedge or ditch the hunter can impede ;
 The timid hare ; she leads the merry dance,
 And led by me the full-mouth'd hounds advance ;
 Still pressing close, at length she yields her breath,
 Whilst huntsman's hollow hails the victim's death.

X. ENIGMA 718, *by Mr. S. Oxley, of Wolsingham, Durham.*

Dear ladies your servant, most humble and fervent,
 To Diary presents his petition ;
 A brief candidate, with tale to relate,
 And hopes you will grant him admission.
 I'm employ'd when you dress, and you oft me caress,
 And secrets unto me discover,

Great favours I share, beyond all compare,
Such as oft are deny'd to your lover.

I'm as gallant in shew as a sprightly young beau,
For I'm dress'd as suits best with your fancy ;
I'm green and I'm blue, and of every hue ;
Yet scarlet best pleases young Nancy.

I'm round, and I'm square, and am quite debonair ;
Yet remorseless you are, if not stupid ;
For many a keen dart you plunge in my heart,
Such as never were sent you from Cupid.

XI. ENIGMA 719, by Mr. Wm. Jones.

No more, ye fair, rely on * Warren's art,
To polish youth, and charms to age impart ;
His boasted efforts in the end will prove
The bane of beauty, and the foe of love.
Be mine the task to make Britannia's fair
Unrival'd shine, and envy'd favours wear.——
Joy is my parent, and from pleasure's source,
I heighten beauty, and improve its force ;
By art engaging make the homely please,
And love's soft fetters ever force with ease.
Man's gen'ral father felt my subtle pow'r,
When Eve with me first grac'd the nuptial bow'r.——
The gallant Norngluk ev'ry art essay'd,
In hopes to gain me from a Greenland maid,
But Ajat, frigid as her native zone,
Reserv'd the boon for Anningait alone.——
When Celia's Pompey fought the gloomy shade,
Where pallid ghosts in sullen pomp parade,
For three whole days the nymph no comfort knew,
For three whole days I ne'er appear'd in view ;
Lo ! on the fourth the gay Myrtillo came,
With love's artillery, and attack'd the dame ;
The soften'd maid to soothe his am'rous pain,
From exile call'd me to his aid again ;
I quick appear'd, and to the swain was giv'n,
A pleasing earnest of his future heav'n.

* Perfumer.

XII. OR PRIZE ENIGMA, 720, by Mr. Henry Lee.——(*Whoever answers it before Candlemas Day has a chance for 3 Diaries, and another for 3 also.*)

Yes, let the tempests rise, let lightnings play,
And mighty darkness shade the face of day ;
Let sevenfold thunders from Olympus fall,
And to the centre shake the solid ball ;
This nought avails ; I can the shock sustain ;
Tho' ever changing, yet am still the same.——
Most objects seem the greatest when they're near,
But farther off, the greater I appear :

Survey'd

Survey'd in front, gigantic limbs arise,
 But back-views dwindle into pygmy size.
 One thing is odd;—dislik'd, I longest stay;
 When most below'd, I seem to fly away.
 I'm hard or easy, just as people make me,
 And long or short, according as they take me. →
 On level plains, in fertile countries found,
 (Where science flourishes, and arts abound)
 With firs close-joining mostly fenc'd around;
 Here midst a group, or single, oft I stand,
 With a fell weapon poiz'd at my command:
 Astonish'd youth survey my form awhile,
 Admit the thoughts of death, and back recoil.
 Just so accoutred stands the simple swain,
 Equip'd for slaughter on th' autumnal plain;
 The village striplings on him cast their eye,
 And think the time of harvest-home is nigh. —
 When dying libertines meet fate's decree,
 Their last, their latest wish, is oft for me.
 The atheist too, at death's approach, declares,
 Possess'd of me, alas!—he'd say his pray'rs. —
 When civil broils have level'd hallow'd fances,
 And cities sunk beneath devouring flames;
 In me behold the mighty fabrics rise,
 Again the temples kiss their kindred skies!

We have been under the necessity, with the greatest reluctance, to curtail most of these Enigmas, for want of room, rather than omit them intirely.

NEW REBUSES AND QUERIES.

I. REBUS, by Mr. Rob. Richardson.

The heads of two shadows, in order I place,
 And fix myself aptly between;
 When, my wishes to crown, and my labours to grace,
 A lovely Diarian is seen.
 But, beware, ye rash youths, who address the coy fair,
 Fondly hoping her credence to gain;
 Unheeded ye sing of your sorrow and care;
 The fugitive laughs at your pain.

We are sorry that the last letter of this very learned and ingenious correspondent, was delayed at the office, and arrived too late to insert the new Enigma this year. We approve of most of his ideas about our new Supplement to the Diary, (a work so universally desired by our correspondents, and improving and extending the Diary itself,) and he will perceive that we had adopted several of them before his letter arrived, particularly by enlarging it to the size of the Diary with part of the mathematics, &c.

II. REBUS, by Mr. Wm. Hart.

What gen'rous Britons more than life esteem;
 A judge in Pluto's realm, as poets dream;
 Th' unhappy nymph who for Narcissus pin'd;
 The place for the departed just assign'd;

And

And she who o'er the lib'ral arts presides;
 She who th' unerring scales of justice guides;
 And he whose trident rules the foaming sea:
 Th' initials join'd, a fair one's name you'll see,
 In whom is elegance of form combin'd,
 With ev'ry grace that beautifies the mind.

III. REBUS, by I. E. Strephon.

To three fifths of a joint, add a father's delight,
 (But be careful to cull the odd pieces aright)
 And you'll see such a nymph as is rare to be found,
 For wit and good-nature so justly renown'd.

IV. REBUS, by Mr. J. Singleton.

To two thirds of a month, and two-thirds of a grain,
 Add five-fifths of a bard, who much honour did gain:
 When these parts you've together in order combin'd,
 Then the name of a fair one you quickly will find;
 Who with beauty's so blest, and whose wit is so fine,
 That she always appears as if something divine.

V. REBUS, by Mr. T. King.

Take four initials from the winds,	Then in an instant you will find
And them in order place;	What oft we glad embrace.

I. QUERY, by Mr. Henry Lee.

Is it possible for two persons, of opposite sexes, to hold a strict friendship with each other, without some degree of love?—Provided that such a friendship does exist, (allowing a little love to be at the bottom of it) and circumstances so embarrassing as to render an union of the parties highly improper; how far ought this friendship to be cherished after the marriage of one of them is consummated?

II. QUERY, by Mr. Isaac Gumley.

It has long been observed that when the sky is red in the evening, it will be fair weather; and when red in the morning, the contrary; which seems also to be corroborated by our Saviour, in Matthew xvi. chap. ver. 2 and 3. I shall be glad to know from some of the Diarian Correspondents, what natural reasons can be assigned for the same.

III. QUERY, by Christianus.

The best method of preserving eggs, is perhaps by varnishing them. I have seen an egg broken that had been varnish'd 12 months, and it was as sound as if it had been new laid. What reason can be assign'd for this?

IV. QUERY, by Mr. James Spilling.

What cause can be assigned for the sun not appearing so large when in the horizon in the evening, as he does in the horizon in the morning?

V. QUERY, by Mr. John Cairns.

When a person happens to see or hear another person yawn, he is forcibly urged to do the same. What may be the reason of this?

VI. QUERY, by Mr. T. Cock.

Whether is the double or single microscope the most proper for nice examinations of very minute objects.

* * * The number of Prizes, and other remarks, are as usual.

ANSWERS to the MATHEMATICAL QUESTIONS.

I QUESTION 878 answered by Mr Geo. Beswick.

IN the given equation $2x^3 - 24 - x^2 + 2x^2y - y^2 = 2xy$, transpose all the terms to one side, and its square root will be $x^2 - x - y = 0$, or $x^2 - x = y$; by which divide the equation $\sqrt{x^2y} - \sqrt{xy} = 2xy$, or $x^2 - x \times \sqrt{xy} = 2xy$, and the quotients give $\sqrt{xy} = 2x$, or $y = 4x$; therefore the two values of y , viz. $x^2 - x = 4x$; hence $x - 1 = 4$, or $x = 5$; and consequently y or $4x = 20$. Therefore the ages are 25 and 20 years.

The same by Mr Geo. Stevenson.

The third quantity transposed to the same side with the first, gives $x^2 - x - 2y \times x^2 - x + y^2 = 0$, which is evidently a square, and its root is $x^2 - x - y$, therefore $x - 1 \cdot x = y$. And the latter of the given equations gives $x - 1 \times \sqrt{xy} = 2y$; this squared, and divided by y , gives $x - 1 \cdot x = 4y$; therefore by substitution $x - 1 \cdot x = x - 1 \cdot 4x$; hence $x - 1 = 4$; and $x = 5$. And the ages 20 and 25.

The same by Mr. John Craggs, of Hylton.

By transposing the 3d quantity, and extracting the root, it is $y = x^2 - x$. The second given equation squared, and divided by xy , gives $x^4 - 2x^3 + x^2 = 4xy$; which added to the 1st and 3d quantities, gives $y = 2x^2 - 6x$. Consequently $2x^2 - 6x = x^2 - x$; hence $2x - 6 = x - 1$; or $x = 5$; and therefore $y = 20$. And the ages 20 and 25.

See other answers to this and the other questions, and the acknowledgments, in the Supplement.

II QUESTION 879 ans. by Mr Matt. Fleck, of Stella.

Put x the length, and y the breadth of the rectangular field; then is xy its area. Hence, by the question

$$x + 5 \times y + 2 \text{ or } xy + 2x + 5y + 10 = xy + 430, \text{ and}$$

$$x + 2 \times y + 5 \text{ or } xy + 5x + 2y + 10 = xy + 445.$$

$$\text{Or } 2x + 5y = 420, \text{ The dif. of these is } 3x - 3y = 15;$$

$$\text{and } 5x + 2y = 435. \text{ } 3 \text{ or } x - y = 5, \text{ and } x = y + 5.$$

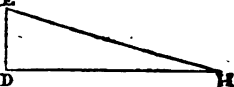
This value taken for x in the equ. $2x + 5y = 420$, gives $7y + 25 = 435$, and $y = 58\frac{2}{7}$; hence $x = 63\frac{4}{7}$.

The same by Mr Henry Tilney, junior.

Let x and y be put for the length and breadth of the rectangle. Then per quest. $x + 5 \times y + 2 = xy + 430$, and $x + 2 \times y + 5 = xy + 445$. By comparing these two together, it appears that $x = y + 5$. Hence by substituting this value of x in the first equation, and reducing it, we have $y = 58\frac{2}{7}$. Whence $x = 63\frac{4}{7}$ poles.

III QUESTION 880 answered by Amicus.

In the right-angled spherical triangle E
 EDH , DH is an arch of the equinoctial,
 measuring the hour from 6 when the sun
 is due east at E ; EH the altitude, DE
 the declination, and DHE the latitude 22° .



By Crackelt's translation of Mauduit's Trigon. page 68, prob. 3, as
 cot. 11° ; tang. 11° ; $s. EH + DH$; $s. EH - DH$, therefore the fines
 of the sum and dif. of EH and DH are in a given ratio; conseq. the
 greater the fine of the sum, the greater that of the dif. and of necessity
 the greater must the dif. itself be: but when the sum is a quadrant,
 its fine is the greatest possible; and therefore as cot. 11° ; tang. 11°
 $:: s. 90^\circ$; $s. EH - DH$ when a max. $= 2^\circ 10'$ fere. Hence $DH =$
 $43^\circ 55'$, $EH = 46^\circ 5'$, and $DE = 15^\circ 39'$ north declin. May 2 at
 $55'$ past 8 A. M.

The same by Mr David Kinnebrook, junior.

Let E be the sun's place at the time of observation, EH his altitude,
 DH part of the equator, DE the declin. then is the $\angle H = 22^\circ$ the
 latitude of the place, whose cosine let $= c$, also the tang. $EH = x$;
 then per Spherics, $1 : c :: x : c x$ the tang. of DH , whence the fluxion of
 the arc DH is $\frac{c \dot{x}}{1 + c^2 x^2}$, and that of the arc EH is $\frac{\dot{x}}{1 + x^2}$; but the dif.
 of the said two arcs is, by the question, a maximum, consequently
 $\frac{\dot{x}}{1 + x^2} - \frac{c \dot{x}}{1 + c^2 x^2} = 0$; hence $x = \sqrt{\frac{1}{c}}$ the tangent of $EH =$
 $46^\circ 4' 58''$ the sun's altitude; and $c x = \sqrt{c}$ the tang. of $DH =$
 $43^\circ 55' 2''$ the measure of the hour from 6; from whence by Spherics
 the declination is found to be $15^\circ 39' 18''$, answering to May 2d, 8 h
 55 m 40 s in the morning.

The same by Mr Wm. Simpson, junior.

Let E be the sun when due east, $\angle H$ the latitude, DE the sun's
 declination, and DH the time from 6. By tab. 1 pa. 280 Simpson's
 Flux. $EH : DH :: \cos. DE : \sin. \angle E$. But when $EH - DH$ is a max.
 then $EH = DH$; conseq. $\sin. \angle E = \cos. DE$. By Spherics, radius
 $: \cos. DE :: s. \angle E = \cos. DE : \cos. \angle H$, or radius $\times \cos. \angle H =$
 $\cos.^2 DE$. Theref. when rad. $= 1$, $\cos. DE = \sqrt{\cos. H} = .9629040$
 the cos. of $15^\circ 39' 18''$ the sun's declin. answering to May 2. Also
 radius : cot. $\angle H :: \tan. DE : \sin. DH = 43^\circ 55' 2''$. Hence the
 observation was made at 8 h 55 m 4" 8th.

IV QUESTION 881 answered by Mr Alex. Rowe,
of Reginnis.

The probability that 3 heads precisely out of 9 halfpence at one
 throw, or, which is the same, that one halfpenny comes up a head

precisely 3 times in 9 throws, by prob. 5; Simpson's Laws of Chance, is $\frac{9 \cdot 4 \cdot 7}{3 \cdot 2^9} = \frac{21}{128}$, and therefore that of the contrary is $\frac{107}{128}$. And, by the same problem, the probability that it happens just 4 times in 5 trials, is $5 \cdot \frac{4}{2} \cdot \frac{3}{3} \cdot \frac{2}{4} \cdot \frac{107 \cdot 21^4}{128^5} = \frac{104047335}{34359738368}$. So that the odds are as 34255691033 to 104047335, or nearly as 329 guineas and $\frac{1}{4}$ to one.

The same by Mr James Ashton, of Harrington.

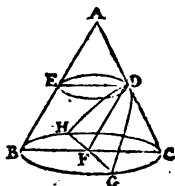
The 9th power of 2, or $2^9 = 512$ are all the chances; and it appears by the binomial theo. that there are $\frac{84}{512}$ and $\frac{428}{512}$, or $\frac{21}{128}$ and $\frac{107}{128}$ chances respectively for and against 3 heads precisely at one throw. Put $a = 21$, $b = 107$, $n = 5$, and $t = 4$; then, in the series $a^5 + 5a^4b$, &c. $5a^4b$ is the term in which the index of a is t ; therefore $\frac{5a^4b}{a+b} = \frac{104047335}{34359738368}$ is the probability of happening precisely 4 times in 5 throws. Therefore the odds against the gamester are 34255691033 to 104047335, or 329 guin. 4s. $10\frac{1}{2}d.$ to 1 guinea.

V. QUESTION 882 answered by Mr John Dalton.

The lengths of pendulums are as the forces of gravity, and the squares of the times of their vibration. If, therefore, the times be constant, the lengths will be simply as the forces. And as gravity decreases in the inverse ratio of the square of the distances from the earth's center; therefore its force at the distance of 4 radii, will be $\frac{1}{16}$ of that at the surface, and consequently the length of the pendulum $\frac{1}{16}$ of its length at the surface $= \frac{1}{16}$ of $39\frac{1}{8} = 2.445$ inches, or $2\frac{4}{9}$ nearly.

VI QUESTION 883 ans. by Mr Geo. Brown, of Newcastle.

Let ABC be the cone, DE the diameter of the circular section, parallel to BC, and DFG half the parabolic section parallel to the side AB. Now BC being 8, and the perp. altitude 10, therefore AB^2 or AC^2 is 116. By the nature of the circle, $\sqrt{BF \cdot FC} = FG$ half the base of the parabola; and, by sim. tri. $BC : BA :: FC : FD = \frac{FC \cdot AB}{BC}$ its altitude;



theref. $\frac{4}{3} FG \cdot FD$ or $\frac{4}{3} \sqrt{BF \cdot FC} \cdot \frac{FC \cdot AB}{BC}$ is the area of the pa-

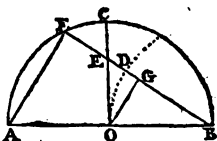
rabolic section. And $p \cdot DE^2$ or $p \cdot BF^2$ is the area of the circular section, where $p = .7854$. Theref. by the quest. $\frac{4}{3} \sqrt{\frac{FC \cdot AE}{BC}}$
 $= p \cdot BF^2$. Hence by squaring, &c. it is $16AB^2 \cdot FC^3 = 9p^2 \cdot BC^2 \cdot$
 BF^3 , or $BF^3 : FC^3 :: 4AB^2 : p \cdot 3BC$; and hence $BF : FC$ or $AD : BC$
 $:: \sqrt[3]{16AB^2} : \sqrt[3]{p \cdot 9BC^2} :: \sqrt[3]{29} : \sqrt[3]{9p^2} :: 1.7351 : 1$. Hence then
 $BF = 5.075$; and $FC = 2.925$.

The same answered by Mr Joseph Peace.

Put p = the perpendicular, b = the base BC , s = AB the slant side of the cone, $a = .7854$, and x = DE or BF the diameter of the circular section. Then $2\sqrt{\frac{BF \cdot FC}{b-x \cdot x}} = 2\sqrt{\frac{b-x \cdot x}{b-x \cdot x}} = GH$ the base of the parabola; and by simple triangles $b : s :: b - x : \frac{b-x}{b} \cdot s = DF$ its alt. Theref. by the quest. $2\sqrt{b-x \cdot x} \times \frac{b-x}{b} \cdot \frac{2}{3} s = ax^3$. Hence by reduction is found $x = \frac{b}{1 + \sqrt[3]{\frac{9a^2b^2}{16s^2}}} = 5.075$ nearly.

VII QUESTION 884 answered by Mr John Cullyer, of Hingham.

Let the figure be drawn as per question, and join AF . Assume the radius BO or $BD = 1$, and put x = sine of $\angle BEO$ or BAF ; then is $EF = 2x$, and as $x : 1 :: BO$ or $1 : \frac{1}{x} = BE$. Hence $EF = 2x - \frac{1}{x}$, A



and $ED = \frac{1}{x} - 1$; and consequently $EF \cdot ED$ or $2x - \frac{1}{x} \times \frac{1}{x} - 1$ must be a max. This being put into fluxions, and reduced, there arises this cubic equation $x^3 + \frac{1}{2}x = 1$, the root of which is $x = .835122$, the sine of $56^\circ 38'$ the $\angle BEO$ or BAF ; and therefore $BE = BO \div .835122 = 1.1974$ &c.

The same by Mr Abel Whitehouse.

Put $BE = x$, and rad. BO or $BD = 1$. Then $BE : BO :: BA : BF$, that is $x : 1 :: 2 : \frac{2}{x} = BF$. Hence $EF = \frac{2}{x} - x = \frac{2-x^2}{x}$, and ED

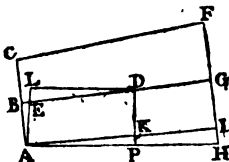
$= x - 1$. Therefore $EF \cdot ED$ or $\frac{2-x^2}{x} \times x - 1$ is a max. The fluxion of which made $= 0$, and the equation reduced, we get $x^3 - \frac{1}{2}x^2 = 1$; the root of which is $x = 1.197$ nearly.

The same by Mr John Boden, of Cromford,

Draw the chord AF , which will be perpendicular to BF ; and let the radius AO or $OB = 1$, and $DE = x$. Then, by similar triangles, $BE : BO :: BA : BF = \frac{2}{1+x}$; hence $EF = BF - BE = \frac{2}{1+x} - 1 = \frac{1-x}{1+x}$; and consequently $DE \cdot EF = \frac{2x}{1+x} - x - x^2$ is a maximum; the fluxion of which made $= 0$, and reduced, gives $2x^3 + 5x^2 + 4x = 1$; the root of which is $x = .1974$. Hence $EF = .47312$, and $DE \cdot EF = .093346$, as required.

VIII QUESTION 885 *ans. by Mr Da. Kinnebrook, jun.*

Let BC be the axis of the frustum, and $ACFH$ a section of it through the middle of two of the opposite hexagonal sides, which section it is evident must be perp. to the horizon. Now the sides of the hexagon at each end being 6 and 9, AB and GH , perpendicular from the centre to the middle of the sides, are easily found



to be $3\sqrt{3}$ and $\frac{9}{2}\sqrt{3}$ respectively. Draw AI parallel to BC , also FD and AE perp. to AH ; then if the frustum rest in equilibrio on the point F , it is requisite that AM should be parallel to the horizon, and that the centre of gravity of the frustum be at the point D where the line FD meets the axis BC . Put $AB = 3\sqrt{3} = a$, $GH = \frac{9}{2}\sqrt{3} = b$, $HI = \frac{3}{2}\sqrt{3} = c$, $AF = 12 = d$, and $AM = x$. Then, by

sim. trian. $AI : AM :: AF : AK$, that is $\sqrt{x^2 - c^2} : x :: d : \frac{dx}{\sqrt{x^2 - c^2}}$

$= AK = ED$; again $AI : IH :: AB : BE$, that is $\sqrt{x^2 - c^2} : c :: a :$

$\frac{ac}{\sqrt{x^2 - c^2}} = BE$; then $BE + ED = \frac{ac + dx}{\sqrt{x^2 - c^2}} = BD$; but BD

is also $= \frac{1}{2}\sqrt{x^2 - c^2} \times \frac{3b^2 + 2ab + a^2}{b^2 + ab + a^2}$ by the method for finding the centre of gravity, (see page 74, *Dr. Hutton's Mathematical Mss.

* There is just published a new edition, greatly enlarged and improved, of this gentleman's large *Treatise on Mensuration*. Also the *Compendious Measurer*, for the Use of Schools, price 3s. 6d. by the same,

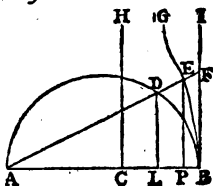
The same answered by Mr Thomas Todd.

(Inserted verbatim, as the author desired).

If x = time from the first term to the equated time, then $t - x$ = time from the equated time to the last term, s = sum of debts and r = sum of all the present worths, and the rest of the notation as given in the question; then by Old method, we have $a + b + c + \&c. + m \times r^{t-x} = ar^{t-n} + br^{t-n'} + cr^{t-n''} + \&c. + m$, the whole divided by r^{t-x} , transforms it into Mr Kersey's method, $a + b + c + \&c. + m = r^x \times ar^{-n} + br^{-n'} + cr^{-n''} + \&c. + mr^{-t}$, or $pr^x = s \therefore x = \frac{\log. \text{ of } s - \log. \text{ of } p}{\log. \text{ of } r}$ the time sought. And lastly, by Malcolm's method, we have the sum of interests $ar^{x-n} - a + br^{x-n'} - b + \&c. = \text{sum of discounts } m - \frac{m}{r^{t-x}} (m - mr^{x-t}) + \&c.$ which by transposition gives $ar^{x-n} + br^{x-n'} + cr^{x-n''} + \&c. + mr^{x-t} = a + b + c + \&c. + m$, or $pr^x = s \therefore r^x = \frac{s}{p} \therefore x = \frac{\log. \text{ of } s - \log. \text{ of } p}{\log. \text{ of } r}$ the very same as given above.

X QUESTION 887 answered by Amicus.

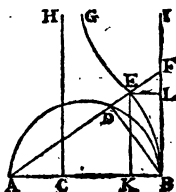
Draw EP and DL parallel to BI . Then since, by the quest. $AC:CB::DE:EF$, by sim. tri. $AC:CB::LP:PB$, and $AB:CB::LB:PB$, or $AB:LB::CB:PB$, or $LB:AL::PB:CP$. But $LB:AL::DB^2 = LB:AB:AD^2 = AL:AB:EP^2:AP^2::PB:CP$. That is, $EP^2.CP = PB.AP^2 = CB - CP.AC + CP^2$, which is Sir Isaac Newton's equation of the 44th species.



The same by Mr John Farey, the Proposer.

The lines being drawn as in the question, from E let fall the perpendiculars EK and EL , and draw DB . Put $AC = n$, $CB = m$, the absciss $CK = x$, and ordinate $EK = y$. Then

$$\sqrt{n+x}^2 + y^2 = AE, \text{ and } AK:KB::AE: \\ m-x. \frac{\sqrt{n+x}^2 + y^2}{n+x} = EF, \text{ also } AE:AK \\ \therefore AE:\frac{n+x \cdot n+m}{\sqrt{n+x}^2 + y^2} = AD, \text{ and hence } AE$$



$AD = DE = \frac{n+x+y^2-n+x \cdot n+m}{\sqrt{n+x+y^2}}$. Then take, as per
 question, $AC : CB :: DE : EF$, or $AC \cdot EF = CB \cdot DE$, that is
 $n \cdot \frac{n-x}{n+x} \sqrt{n+x+y^2} = m \cdot \frac{n+x+y^2-n+x \cdot n+m}{\sqrt{n+x+y^2}}$, which
 equation reduces to $xy^2 = m - x \cdot n + x$, or $xy^2 = -x^3 + \frac{m}{2n} \} x^2$
 $\frac{1+2mn}{-nn} \} x + mn^2$, an equation belonging to the 44th species of Sir
 Isaac Newton's curves.

XI QUESTION 888 answered by Mr Isaac Saul.

The length of the stick, or slant side of the cone, being 5, and the
 radius of its base 3 feet, therefore $\sqrt{5^2 - 3^2} = \sqrt{16} = 4$ is the al-
 titude of the whole cone described by the stick. But the centre of
 oscillation is at $\frac{2}{3}$ of the length of the stick, and therefore $\frac{2}{3}$ of 4, or $2\frac{2}{3}$
 is the altitude of the cone described by the part to the centre of oscil-
 lation, which call a . Then, by page 243 of Simpson's Fluxions;
 $3.14159 \sqrt{\frac{2a}{16\frac{1}{2}}} = 1''.809066$ is the time of one revolution of the
 stick; conseq. $1.809066 \times 7 \times 1142 = 14461.7$ feet, or 2 miles and
 2300 $\frac{1}{2}$ yards, is the direct distance of the cloud as required.

The same answered by Allenfis.

The slant side of the whole cone being 5, and the radius of its base
 3 feet, therefore $\sqrt{5^2 - 3^2} = \sqrt{16} = 4$ is its altitude; and because
 the centre of oscillation is at $\frac{2}{3}$ of the length of the stick; therefore
 $\frac{2}{3}$ of 4, or $2\frac{2}{3}$ is the altitude of the cone above the centre of oscillation,
 which call a ; also $n = 3.1416$, and $p = 16\frac{1}{2}$. Then, by prob. 9,
 Emerson's Centrip. Forces, we have $n\sqrt{\frac{2a}{p}}$ = the periodic time of one
 revolution. And as sound flies at the rate of 1142 feet in one second,
 and the stick made 7 revolutions from the instant of seeing the light-
 ning, till the report of the thunder, we have $n\sqrt{\frac{2a}{p}} \times 7 \times 1142 =$
 14461.67 feet = 2.739 miles, the distance of the thunder cloud
 required.

XII QUESTION 889 answered by Mr Alexander Rowe,
of Reginnis.

Since the fluxion of the logarithm of any quantity is equal to the fluxion of that quantity divided by the same quantity; if the quantity be $x + c$, where c is a small given number, the fluxion of it is \dot{x} , and the fluxion of its logarithm is $\frac{\dot{x}}{x+c}$, which, by dividing the numerator by the denominator, is

$$\frac{\dot{x}}{x+c} = \frac{\dot{x}}{x} - \frac{c\dot{x}}{x^2} + \frac{c^2\dot{x}}{x^3} - \frac{c^3\dot{x}}{x^4} + \frac{c^4\dot{x}}{x^5} \&c;$$

then taking the fluent of every term, we have the

$$\log. \text{ of } x \mp c = 1. x \mp \frac{c}{x} - \frac{c^2}{2x^2} \mp \frac{c^3}{3x^3} - \frac{c^4}{4x^4} \&c.$$

Now if we take the four numbers mentioned in the question to be $x - \frac{3}{2}$, $x - \frac{1}{2}$, $x + \frac{1}{2}$, $x + \frac{3}{2}$, which have the common difference 1; then making c successively equal to $-\frac{3}{2}$, $-\frac{1}{2}$, $\frac{1}{2}$, $\frac{3}{2}$, the above theorem for the log. of $x \mp c$ will give these four logs. viz.

$$1. (x - \frac{3}{2}) = 1. x + m \times (-\frac{3}{2x} - \frac{9}{4.2x^2} - \frac{27}{8.3x^3} - \frac{81}{16.4x^4} \&c)$$

$$1. (x - \frac{1}{2}) = 1. x + m \times (-\frac{1}{2x} - \frac{1}{4.2x^2} - \frac{1}{8.3x^3} - \frac{1}{16.4x^4} \&c)$$

$$1. (x + \frac{1}{2}) = 1. x + m \times (+\frac{1}{2x} - \frac{1}{4.2x^2} + \frac{1}{8.3x^3} - \frac{1}{16.4x^4} \&c)$$

$$1. (x + \frac{3}{2}) = 1. x + m \times (+\frac{3}{2x} - \frac{9}{4.2x^2} + \frac{27}{8.3x^3} - \frac{81}{16.4x^4} \&c)$$

where m is the modulus of the system of logarithms. Then, taking the successive differences of these logarithms, the third difference

$$\text{is } 6m \times (\frac{3^2-1}{3.23x^3} + \frac{3^4-1}{5.25x^5} + \frac{3^6-1}{7.27x^7} + \frac{3^8-1}{9.29x^9} \&c)$$

$$\text{or } 2m \times (\frac{1}{x^3} + \frac{3}{2x^5} + \frac{39}{16x^7} + \frac{205}{48x^9} \&c).$$

Now, by the quest. $a = x - \frac{1}{2}$, and p or $\frac{a+2}{2a+1} = \frac{2x+3}{4x}$; theref.

$$pa^3 - \frac{1}{2} = \frac{16x^4 - 24x^2 - 3}{32x}, \text{ and } \frac{m}{2pa^3 - \frac{1}{2}} = \frac{32mx}{16x^4 - 24x^2 - 3}$$

$$\text{is } = 2m (\frac{1}{x^3} + \frac{3}{2x^5} + \frac{39}{16x^7} + \frac{189}{48x^9} \&c),$$

which agrees with the series for the 3d dif. except in the last term, in which it differs from it by only $\frac{2}{3x^9}$ which when x is = 100, will have

cyphers in the first 18 places of decimals, and a 6 in the 19th place, to multiply by m the modulus.

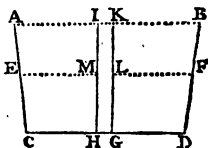
XIII QUESTION 890 answered by Amicus.

In this question, if the angle of vibration be of any considerable magnitude, the final equation will involve second fluxions squared when freed from surds, and be so complex, as to render the separability of the unknown quantities in a manner hopeless. But if they be exceedingly small, let $b =$ the versed sine of the arc of vibration to the constant radius $= a =$ the length of the string, $x =$ the part of that versed sine answerable to the vertical descent in the vibration of the less body during the time t , gravity $= 32 \frac{1}{2} = 2s$, $u =$ the distance of that body from the pulley at the end of that time, and $v =$ the velocity in the direction of the string; putting $m^2 = \frac{w + v}{w - v}$, then by the nature of motion, and the question $v \dot{v} = - \frac{2s}{m^2} u$ nearly, and $v = 2 \sqrt{\frac{a - u}{m^2}} s$. But the vibrating velocity of the body perpendicular to the string $= 2 \sqrt{s} x$, and the space described with that velocity $= \frac{\dot{x} \sqrt{u}}{\sqrt{2b - 2x}}$, hence $\dot{x} = - \frac{\dot{u}}{v} = - \frac{m \dot{u}}{2 \sqrt{s \cdot a - u}} = \frac{\dot{x} \sqrt{u}}{2 \sqrt{2s} \sqrt{bx - x^2}}$, $\dot{x} = \frac{m \sqrt{a - u}}{\sqrt{s}}$, and $-\frac{m u \sqrt{2}}{\sqrt{au - u^2}} = \frac{\dot{x}}{\sqrt{bx - x^2}}$; let $\Lambda =$ the arc whose versed sine $= \frac{2x}{b}$ to radius r , $\Xi =$ that to versed sine $\frac{2u}{a}$, and $p = 3.14159$, then the equa. of the correct fluents is $\frac{p - \Xi \cdot m \sqrt{2}}{a} = \Lambda$, from which equation the value of x and $\sqrt{bx - x^2}$, answering to any value of u , becomes known, shewing the nature of the track of the weight. And when the string becomes vertical, $\Lambda = p$, at which time therefore the arc Ξ becomes given and $= p \times \frac{m \sqrt{2} - 1}{m \sqrt{2}}$, whose versed sine $\frac{2u}{a}$ gives u the length of the vibrating string when vertical; let this value of $u = e$, then in the same manner as before it will be found that at the end of one whole vibration, the arc whose versed sine is $\frac{2u}{e}$, to radius r , is $= p \times \frac{m \sqrt{2} - 1}{m \sqrt{2}}$, confeg. $\frac{2u}{e} = \frac{2e}{a}$, and $u = \frac{e^2}{a} =$ the distance of the less weight from the pulley at the end of one vibration, and the time of one whole vibration $= \sqrt{a + \sqrt{e}} \times m \sqrt{\frac{a - e}{sa}}$, as required.

This question was also answered by Messieurs Cullyer, Howard, Rowe, and Mr Mudgz, the proposer, whose ingenious solution we shall insert,

XIV QUESTION 891 answered by Lieut. Wm. Mudge;
of the Royal Artillery.

I apprehend the numbers expressing the breadth of the ditch at top and bottom, have been interchanged; I shall therefore change the dimensions, and take the ditch as widest at the bottom. Let therefore $ABDC$ be the end of the ditch, and $GHIK$ the cut; put $x = HM$ any variable altitude of the water within; and $g = 16\frac{1}{2}$ feet; by the data $HI : HM :: AB - CD : EF - CD = \frac{2}{9}x$, therefore $EF = CD + \frac{2}{9}x = 30 + \frac{2}{9}x$, and hence $30 + \frac{2}{9}x \times 1$ mile



$= 30 + \frac{2}{9}x \times 5280$ the area of the surface of the water when it is at EF ; and the quantity running through the cut GM is equal to $\frac{2}{3}$ of what would run through an equal aperture with the greatest velocity, or that at GH , which velocity is equal to that of a heavy body falling through MH or x , namely $2\sqrt{gx}$, that is, the quantity per second running through MG is $\frac{2}{3}MG \times 2\sqrt{gx}$ or $\frac{8}{3}x\sqrt{gx}$; and hence, dividing this quantity by the surface of the water at EF , the quotient $\frac{\frac{8}{3}x\sqrt{gx}}{30 + \frac{2}{9}x} \times \frac{1}{440}$ will be the velocity v per second with which the surface of the water descends; therefore, by uniform motions, $v : -\dot{x} :: 1'' : t = \frac{-\dot{x}}{v} = \frac{-440\dot{x}}{\sqrt{g}} \times \frac{135 + x}{x^{\frac{3}{2}}}$ the flux. of the time of exhausting. And the correct fluent of this, it being nothing when $x = 9$, is $\frac{880}{\sqrt{g}} \times \frac{135 - x}{\sqrt{x}} - 42 = t$ the time of exhausting till the depth is x . And when $x = 1$ inch, or $\frac{1}{12}$ foot, this expression gives $t = \frac{880}{\sqrt{193}} \times 1619 - 84\sqrt{3} = 93338$ seconds $= 25$ hrs. 55 min. 38 sec. the time required.

Had the dimensions been as in the question, or the ditch narrowest above, by a similar process the time of exhausting to one inch deep would be 98330 seconds, or 27 hrs. 18 min. 50 sec. And the time of a complete exhaustion, in both cases, is infinite.

Note. This solution is on the supposition that the velocity of issuing water is equal to that acquired by a body in falling through the whole height of the surface above the orifice.

XV or PRIZE QUESTION answered by Amicus.

The general equation of the redundant hyperbolas having one diameter only is

$$xy^2 = c \cdot x + e \cdot b + x \cdot d + x = cx^2 +$$

$$c \cdot e + b + d \cdot x^2 + c \cdot bd + e \cdot b + d \cdot x +$$

$$eebd, \text{ where } \Lambda B = x, CB = y, \Lambda b =$$

$$-x, \Lambda t = e, \Lambda l = b, \Lambda r = d, DA =$$

$$\frac{e + b + d}{2}, \frac{\Lambda d}{\Lambda D} = \sqrt{e}, \frac{CB}{DB} = \frac{y}{x + DA},$$

which at the point where the curve

$$\text{cuts the asymptote} = \frac{\Lambda d}{\Lambda D} = \sqrt{e} =$$

$$\frac{y}{x + DA}; \text{ this equation reduced is } x = \frac{4ecd}{c - b - d - 4bd}, \text{ for the}$$

value of the abscissa at the point where the curve cuts the asymptote. Hence it appears, that so long as $c - b - d$ is greater than $2\sqrt{bd}$, this value of x will be affirmative, and the two hyperbolas adjacent to b and d will be ambigenous; and since then also e is greater than

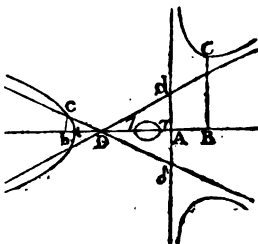
$b + d$, therof. e must be greater than DA or $\frac{e}{2} + \frac{b + d}{2}$; consequently

whilst these two hyperbolas are ambigenous, Λt must also be greater than ΛD , and that adjacent to D an inscribed one, and the curve of one of the two species discovered by Mr Stirling. But if $2\sqrt{bd}$ be greater than $c - b - d$, the above value of x is negative, and the point of intersection on the contrary side of Λd ; and here DA or $\frac{e + b + d}{2}$ may be either less or greater than Λt or e according as

$b + d$ is less or greater than e ; if $b + d$ be greater than e , then $c - b - d$ is necessarily less than $2\sqrt{bd}$, and the curves are those drawn in Sir Isaac's 17th, 18th, 19th, and 20th figures. But if e be greater than $b + d$, and $c - b - d$ less than $2\sqrt{bd}$, then must DA be less than Λt , and the above value of x negative; here then the curve is not as described in those figures, but as in that here annexed, the hyperbola adjacent to D cutting its asymptotes, and then including them within itself, whilst the other two are inscribed ones. If Λl and Λr are unequal, the curve has an oval; if equal, a conjugate point. But if they be impossible, or the equation of the curve be $xy^2 =$

$$cx^2 + c \cdot e + b \cdot x^2 + c \cdot a^2 + b \cdot e \cdot x + cea^2 = x^2 + e \cdot x^2 + bx + a^2,$$

where a is greater than $\frac{1}{2}b$, then $-x = \Lambda b = \frac{4ea^2}{4a^2 - e - b^2}$ at the intersection of the curve and asymptote; and if $2a$ be greater than $c - b$, the curve will still be as in the annexed figure, but without oval or conjugate point.



- Ex. gr. 1. Let $e = 10$, $b = 5$, $d = 4$; then $Ab = 10 \cdot 126582$, and $7\tau = 1$ = the diameter of the oval.
2. Let $e = 10$; and $b = d = 4 \cdot 5$; then $Ab = 10 \cdot 125$, and the oval becomes a point.
3. Let $e = 10$, $b = 9$, and $a = 5$; then $AD = 9 \cdot 5$, and $Ab = 10 \cdot 1010$ &c; $A\eta$ and $A\tau$ being impossible.

SCHOLIUM. Though these three curves thus differ in figure from those drawn by Sir Isaac for the 10th, 13th, and 14th species, they cannot, with propriety, be said to constitute new ones; for they are all included in his descriptions of those species; which descriptions will equally hold for these, word for word, and letter for letter. Moreover, the two species discovered by Mr Stirling ought not to follow Sir Isaac's 14th, but the first of them ought immediately either to precede or follow Sir Isaac's 10th, and the second his 13th species.

The QUERY answered by Terricola.

Let c be the centre of the burning glass, whose breadth is AL ; and focal length CF ; and let o be the centre of the sun, and sv the extremities of his diam. which is at right angles to the line co . Produce co to F , and draw IFM perp. to CF ; also draw the lines SGM , VGI cutting IFM in I and M . Then will IM be the sun's image, F that of his centre, and I and M those of the extreme points of his body s and v . But the density of the sun's rays upon the image IM is supposed to be the same as at their incidence on AL , and conseq. $IM = AL$. And the triangles FGM , SGO being similar, $MF : FG :: SO : OG$, whence $2MF = MI = AL$; $FG :: 2SO = SV : OG$, that is, As the diameter of the glass; is to its focal length; so is the diameter of the sun; to the distance at which the glass must be placed from the sun, to render the density of the rays in the focus equal to that of the incident rays. Q. E. F.



EXAMPLE. Let the diameter of a burning glass be 2 inches, and its focal length 6 inches. It will be. as $2 : 6 :: 1$ diameter of the sun; to 3 diameters of the sun $= 2612000$ miles, the distance required.

N. B. Other answers to all the questions, &c. with some new questions, &c. may be seen in the *Diary Supplement*, containing 3 sheets, price only 6d.

NEW QUESTIONS.

I QUESTION 893, by Mr. James Ashton, of Harrington.

In what time will an annuity of 83*l.* 10*s.* discharge a debt of 900*l.* allowing interest on each at $4\frac{1}{2}$ per cent.?

II QUESTION 894, by Philalethes Cleasbyensis.

Q of Amsterdam sends to R of Paris 2000 crowns, at 91*d* Flemish per crown, at double usance, or 2 months, and pays $\frac{3}{20}$ per cent. brokerage; with orders to remit him again the value at 93*d* per crown, allowing at the same time $\frac{1}{2}$ per cent. for commission: What is gained per cent. per annum by a remittance thus managed.

III QUESTION 895, by Mr N. Hopkins.

A merchant began trade with a certain sum of money, which amounted at the end of 7 years to 6250*l.*, and had accumulated in the following manner, viz. at the end of the 3d year he had just doubled the first sum. The next year he gained the square root of that doubled sum, and 10*l.* more. And the last 3 years he squared the whole. Query the first sum.

IV. QUESTION 896, by Mr John Birch, of Moulton.

Having a conical vessel full of liquor, standing upon its less end, the radius of which is 20 inches, into which I immersed a cone of equal base and altitude, the convex superficies of which is 2827.44, and is equal to the area of the top of the vessel. Required its content, and the quantity of liquor in ale gallons that overflowed by so doing?

V QUESTION 897, by Mr Matt. Terry, Land-Surveyor, of Askrigg.

To determine the ratio of two elastic balls A and B, so that A, by striking B at rest, shall lose one-fifth of its motion.

VI QUESTION 898, by Mr Isaac Saul.

Given the curve superficies of the frustum of a sphere, equal to 1600; and the difference between its solid content and that of a cylinder of the same diameter and altitude, equal to 1800; to determine the diameter and altitude.

VII QUESTION 899, *by Mr Alexander Rowe.*

A bets B 5 guineas to 10 shillings, that in throwing up 5 half-pence, they shall not come up either all heads, or all tails, once in 4 throws: whether has the advantage, and how much?

VIII QUESTION 900, *by Mr William Hardy, of Cottingham.*

There is a geometrical square, whose side is 12 inches, required the radius of a circle, whose centre shall be in the middle of one of its sides, that shall cut the said square into two equal parts.

IX QUESTION 901, *by Mr John Cullyer, of Hingham.*

A carpenter having nearly felled a tree 60 feet high, wishes to be informed at what height he must fix a rope to it, of 70 feet long, that when standing on the ground he may draw the tree down with the most ease.

X QUESTION 902, *by Mr John Farey, of London.*

There is a cubical block of marble, whose side in inches is expressed by two digits; the superficies of the block is equal to 864 times the sum of the said digits, and its solidity is equal to 576 times the square of the sum of the said digits: required the dimensions.

XI QUESTION 903, *by the Rev. Mr John Hellins.*

How many cubical feet of water will freely flow through a circular hole, of one foot diameter, in a board fixed perpendicular to the horizon, in one hour; the surface of the water being kept always level with the top of the hole.

XII QUESTION 904, *by Mr John Bonnycastle.*

It is asserted by Mr Castillioneus, in his Commentary upon Sir Isaac Newton's Arithmetic, that any rational cubic equation of the irreducible case, (as $x^3 - 15x = 3$), will have at least one rational root: it is required to shew the truth or falsity of this assertion.

XIII QUESTION 905, *by Amicus.*

What are the transverse and conjugate axes of the least ellipsis, such that a circle whose radius is unity may be the greatest that can be inscribed in any one quadrant thereof.

XIV QUESTION 906, by Mr. Isaac Dalby.

Suppose the earth an Ellipsoid; having the equatorial and polar diameters 6993486 and 6954420 fathoms, respectively: now if a flagstaff be placed perpendicular to the horizon in latitude 50° north, longitude 0; and a theodolite in latitude $49^{\circ} 40'$ north, longitude $30'$ east; what will be the observed horizontal angle, taken with the theodolite, between an object placed in its meridian, and the flagstaff; supposing the flagstaff is long enough to be seen through the telescope when it is horizontal, and its axis 10 feet above the surface of the earth?

XV or PRIZE QUESTION 907; by Lieut. Wm Mudge;
of the Royal Artillery.

(Whoever answers it before Candlemas Day, has a chance for 10, and another for 8, Diaries)

It is required to determine the quantity of heat received by the great comet, expected to appear in the beginning of the year 1789, during its passage from the aphelion to its perihelion, the quantity received in one second when at the mean distance of the earth being given equal to 9; and to compare the mean heat of the earth to the greatest heat of the comet when in its perihelion: the period of the comet being $128\frac{1}{2}$ years, and its perihelion distance 0.44851, the radius of the earth's orbit being 1.

* * * The prizes for the several solutions have been determined by lot as follows: First, for the Prize Question, to Lieut. Mudge, 10, and Mr John Farcy 8 Diaries.—2d, for the Prize Enigma, to Miss Louisa Amelia Harpur and Mr Wm. Evans each 8 Diaries.—3d, for the general answers to the Enigmas, to Mr Wm Gradidge and Miss Polly Harrison each 8 Diaries.—4th, for the Rebuses, Queries, &c. to Mr John Dalton and Mr James Williams each 6 Diaries. All of whom will please to send for them to Stationers-Hall.

All letters for the use of the Diary must be directed thus, "The Author of the Ladies' Diary, Stationers-Hall, London." And they must be franked or post paid. or they will not be received; and the last of them must be sent before the first of May.—The gentleman who enquires for eclipses, may find the calculation of them at large in Hutton's Mathematical Miscellany.

F I N I S.

VOX STELLARUM:
OR, A LOYAL
ALMANACK

For the Year of HUMAN REDEMPTION,
MDCCLXXXIX.

BEING THE
First after BISSEXTILE or LEAP YEAR.

IN WHICH ARE CONTAINED

All THINGS fitting for such a **WORK**; as;

A TABLE of **TERMS** and their **RETURNS**;

The **Full**, **Changes**, and **Quarters** of the **MOON**;

The **Rising**, **Southing**, and **Setting** of the **SEVEN STARS**,
and other **Fixed Stars** of **Note**; the **MOON'S** **Age**, and

A TIDE TABLE fitted to the **same**;

The **Rising** and **Setting** of the **SUN**; the **Rising**, **Southing**,
and **Setting** of the **MOON**; **Mutual Aspects**, **Monthly Ob-**
servations; and many other **Things**, **useful** and **profitable**.

UNTO WHICH ARE ADDED,

Astrological Observations on the **Four Quarters** of the **Year**.

An **HIEROGLYPHIC**, alluding to these present **Times**;

A remarkable **CHRONOLOGY**; the **Eclipses**.

And other MATTERS both **curious** and **useful**.

With a particular **Judgement** of the **Eclipses**,

and many other **Things** relating to **Astronomy**.

111

By FRANCIS MOORE, **Physician.**

L O N D O N,

Printed for the **COMPANY** of **STATIONERS**, 1789.

And Sold by **ROBERT HORSFIELD**, at their Hall
in **LUDGATE STREET**, [Price Nine Pence, stitched.]

A plain and easy TABLE, shewing the Time of HIGH-WATER.

Note, That the Moon's Age being taken Notice of in the TABLE, you have the Time of HIGH-WATER at all the under-named Places.		Queenborough, Portsmouth, Southampton, Kentish Knoak, Leith, Beachy, Isle of Wight, Dunkirk, Cannedado, Coast of Flanders, at the Spits and Dover Pier.		Graveland, Downs, Blackneis, Romney, Thanet, Scilly Half-tide, North-Cape before Gocquit, and between Calais and Dover.		London, Tinnmouth, Hartlepool, Amsterdam, Whitby, Dort, Gascoign, West of Ireland, at Grois, at Rotterdam, and in Robin-Hood's Bay.		Newcastle, Humber, Falmouth, Severn-mouth, at the Spurn between Scilly and Lizard, Ramsey, Dartmouth, Guernsey, Torbay, St. Malo's.		Plymouth, Antwerp, Hull, St. David's, Holms of Bristol, Lundy, St. Paul's, Salcoln without Ushant, at Waterford, and at Lynn Half-tide.		Bristol-Key, Weymouth-Key, Aldborough, Foulnefs, Lims, the Start before St. Nicholas, Sedmouth in the Channel, between Foy and Falmouth.		Yarmouth-Road, Harwich, Calais-Road, Dover, Cowes, Caen, the Frith, South-Foreland, St. Helen's, Coast of Normandy, and Picardy.		Hague, Peter-port, Dublin, between Beachy and the Isle of Wight, Yarmouth, St. Magnus's Sound, Combay, without the Callets in the Channels.		
D's A.	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m
1	16	12	48	2	18	3	48	6	3	6	48	7	33	11	18	9	3	18
2	17	1	36	3	6	4	36	7	51	7	36	8	21	12	6	9	51	3
3	18	2	24	3	54	5	24	8	39	8	24	9	9	9	54	2	39	3
4	19	3	12	4	42	6	12	9	27	9	12	10	6	11	42	11	27	4
5	20	4	0	5	30	7	0	10	15	10	3	10	4	11	30	12	15	5
6	21	4	48	6	18	7	48	10	3	10	3	10	4	11	18	1	3	6
7	22	5	36	7	6	8	36	10	51	11	36	12	21	13	6	1	54	7
8	23	6	24	7	54	9	24	11	39	12	24	13	6	14	54	2	39	8
9	24	7	12	8	42	10	12	12	27	13	6	14	6	15	42	3	27	9
10	25	8	0	9	30	11	0	13	15	14	0	15	6	16	30	4	15	10
11	26	8	48	10	18	11	48	14	3	15	3	16	6	17	18	5	3	11
12	27	9	36	11	6	12	36	15	51	16	36	17	6	18	6	5	51	12
13	28	10	24	11	54	13	24	16	39	17	24	18	6	19	54	6	39	13
14	29	11	12	12	42	14	12	17	27	18	6	19	6	20	42	7	27	14
15	30	12	0	1	30	15	0	18	15	19	6	20	6	21	30	8	15	15

The foregoing Table explained.

NOTE, That the Moon's Age being taken Notice of by the Rule in this TABLE, you may obtain the Time of HIGH-WATER at all the Places above named. Observe, When the Moon is one or sixteen Days old, it is HIGH-WATER at London, Tinnmouth, Hartlepool, &c. at 3 o'Clock, and 48 Minutes past. Observe the same of the rest, which is plain to the meanest Capacity. The Day of the Moon's Age you have in the sixth Column on every Left-hand Page of the Calendar.

REGAL TABLE. 3

KINGS and QUEENS from the Conquest.

KINGS Names.	Began their Reign.	Reigned Y. M. D.	Since their Reigns..	Buried at
Will. Conq.	1066 Oct. 14	20 10 26	672 Sept. 9	Caen, Norm
W. Rufus	1087 Sept. 9	12 10 24	689 Aug. 2	Winchester
Henry I	1100 Aug. 2	35 3 29	654 Dec. 1	Reading
Stephen	1135 Dec. 1	18 10 24	635 Oct. 25	Feverham

The Saxon Line restored.

Henry 2	1154 Oct. 25	34 8 11	600 July 6	Fonteverault
Richard 1	1189 July 6	9 9 0	590 April 6	Fonteverault
K. John	1199 April 6	17 6 13	573 Oct. 19	Worcester
Henry 3	1216 Oct. 19	56 0 28	517 Nov. 16	Westminster
Edward 1	1272 Nov. 16	34 7 21	482 July 7	Westminster
Edward 2	1307 July 7	19 6 18	462 Jan. 25	Gloucester
Edward 3	1327 Jan. 25	50 4 27	412 June 21	Westminster
Richard 2	1377 June 21	22 3 8	390 Sept. 29	Westminster

The Line of Lancaster.

Henry 4	1399 Sept. 29	13 5 20	376 Mar. 20	Canterbury
Henry 5	1413 Mar. 20	9 5 11	367 Aug. 31	Westminster
Henry 6	1422 Aug. 31	38 6 4	328 Mar. 4	Windfor

The Line of York.

Edward 4	1461 Mar. 4	22 1 5	306 April 9	Windfor
Edward 5	1483 April 9	0 2 13	306 June 22	Unknown.
Richard 3	1483 June 22	2 2 0	324 Aug. 22	Leicester.

The Families United.

Henry 7	1485 Aug. 22	23 8 0	280 Apr. 22	Westminster
Henry 8	1509 April 22	37 9 6	242 Jan. 28	Windfor
Edward 6	1547 Jan. 28	6 5 8	236 July 6	Westminster
Q. Mary	1553 July 6	5 4 11	231 Nov. 17	Westminster
Q. Elizabeth	1558 Nov. 17	44 4 7	186 Mar. 2	Westminster

The Union of the Two Crowns

James I	1603 Mar. 24	22 0 3	164 Mar. 27	Westminster
Charles I	1625 Mar. 27	23 10 3	140 Jan. 30	Windfor
Charles 2	1649 Jan. 30	36 0 7	104 Feb. 6	Westminster
James 2	1685 Feb. 6	4 0 7	100 Feb. 13	St. Germain
Will & Mar.	1689 Feb. 13	13 0 23	87 Mar. 8	Westminster

The Union of the Two Kingdoms.

Q. Anne	1702 Mar. 8	12 4 24	75 Aug. 1	Westminster
George I	1714 Aug. 1	12 10 10	62 June 11	Hanover
George 2	1727 June 11	33 4 14	29 Oct. 25	Westminster
George 3	1760 Oct. 25	Crowned Sept. 22, 1761.		

A TABLE of the Equation of Time for regulating Clocks and Watches for 1789. Note, fa. Clock too fast, that is, your Clock, to be set right, must be so much faster than the Sun Dial. flo. Clock too slow, that is, your Clock must be so much slower than the Sun Dial.

D	January	February	March	April	May	June
1	4' fa. 23"	14' fa. 9"	12' fa. 33"	3' fa. 47"	3' fl. 11"	2' fl. 33"
3	5 19	14 21	12 7	3 10	3 25	2 14
5	6 13	14 31	11 40	2 35	3 36	1 54
7	7 4	14 37	11 10	2 6	3 46	1 33
9	7 54	14 40	10 39	1 26	3 53	1 10
11	8 42	14 39	10 7	0 52	3 58	0 47
13	9 27	14 36	9 33	0 21	4 0	0 22
15	10 9	14 30	8 58	flow. 10	4 0	fast 3
17	10 48	14 21	8 23	0 39	3 58	0 29
19	11 25	14 9	7 47	1 6	3 54	0 55
21	11 59	13 54	7 10	1 32	3 47	1 21
23	12 30	13 37	6 32	1 57	3 38	1 47
25	12 58	13 18	5 56	2 17	3 27	2 13
27	13 22	12 57	5 19	2 37	3 13	2 38
29	13 43		4 42	2 55	2 59	3 2

D	July	August	Septemb.	October.	Novemb.	Decemb.
1	3' fa. 20"	5' fa. 52"	0' fl. 24"	10' fl. 32"	16' fl. 14"	10' fl. 22"
3	3 48	5 43	1 2	11 9	16 14	9 35
5	4 9	5 32	1 42	11 45	16 10	8 45
7	4 28	5 18	2 22	12 19	16 3	7 53
9	4 46	5 2	3 3	12 52	15 53	6 59
11	5 3	4 44	3 44	13 22	15 39	6 4
13	5 17	4 24	4 26	13 50	15 22	5 6
15	5 30	4 1	5 8	14 16	15 1	4 8
17	5 41	3 37	5 50	14 40	14 37	3 9
19	5 50	3 10	6 31	15 2	14 10	2 9
21	5 57	2 42	7 13	15 20	13 39	1 9
23	6 2	2 12	7 54	15 36	13 6	0 8
25	6 4	1 40	8 35	15 50	12 29	fast 52
27	6 4	1 6	9 15	16 0	11 49	1 51
29	6 1	0 31	9 54	16 8	11 7	2 0

How to set a Clock or Watch by this Table. For example, Jan. the 1st, I find, by looking into the Table, that a Clock to be right must be 4 Minutes 23 Seconds faster than a Sun Dial; therefore I set it so much faster accordingly. And so of the rest. Twelve o'Clock is the best Time to set a Clock or Watch by a Dial.

Note. A Sun Dial shews Solar or Apparent Time; but a Clock, &c. should be set to equal or Mean Time, as the Table directs, to go true.

L A W T E R M S, &c.

5

A T A B L E of T E R M S and Returns for the Year 1789.

Hilary Term begins Jan. 23, ends Feb. 12.

Returns or Effoign Days.		Exc.	Ret.	Ap.	W. D.
In eight Days of St. Hilary,	— Jan. 20	21	22	23	Friday
In fifteen Days of St. Hilary,	— 27	28	29	30	Friday
On the Mor. of the Purif. of the Bl. V. M.	Feb. 3	4	5	6	Friday
In eight Days of the Purif. of the Bl. V. M.	9	10	11	12	Thursday

Easter Term begins April 29, ends May 25.

In fifteen Days of Easter	— Apr. 26	27	28	29	Wednesd.
From Easter Day in three Weeks	May 3	4	5	6	Wednesd.
From Easter Day in one Month	10	11	12	13	Wednesd.
From Easter Day in five Weeks	17	18	19	20	Wednesd.
On the Mor. of the Ascension of the Lord	22	23	24	25	Monday

Trinity Term begins June 12, ends July 1.

On the Morrow of the Holy Trinity	— June 8	9	10	12	Friday
In eight Days of the Holy Trinity	— 14	15	16	17	Wednesd.
In fifteen Days of the Holy Trinity	21	22	23	24	Wednesd.
From the Day of the H. Tr. in 3 Weeks	28	29	30	J. 1	Wednesd.

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the Morrow of All Souls	— Nov. 3	4	5	6	Friday
On the Morrow of St. Martin	— 12	13	14	16	Monday
In eight Days of St. Martin	— 18	19	20	21	Saturday
In fifteen Days of St. Martin	— 25	26	27	28	Saturday

N. B. No Sittings in Westminster-Hall on the Second of February, Ascension-day, and Midsummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but four Days.

Note, The first and last Days of every Term are the first and last Days of Appearance.

Common Notes for the Year 1789.

Golden Number	— 4	Lent begins	—	Feb. 25
Epact	— 3	Easter-day	—	Apr. 12
Dominical Letter	— D	Rogation Sunday	—	May 17
Cycle of the Sun	— 6	Ascension-day	—	21
Sundays after Epiphany	— 4	Whit Sunday	—	31
Number of Direction	— 22	Sundays after Trinity	—	24
Septuagesima Sunday	— Feb. 8	Advent Sunday	—	Nov. 29

I N T R O D U C T I O N.

In which are contained RULES for judging of the WEATHER by the
BAROMETER.

THE great Demand from the Publick for MOORE's ALMANACK has not only testified its kind Reception in the World, but, as a further Proof of the high Estimation in which it is held, has induced other Presses to send forth spurious Productions under the same Signature, one pretending to have vested a Right in the Company of Stationers formerly of printing the same, and that now he has transferred the same to Messrs. Pearson, &c. Birmingham, with indeed as great Propriety as I might give my Share of the Tower of London to the Great Mogul; while another gives the World to know, that "all Almanacks, published under the Name of such an Impostor, must (to use his own Words) be false and counterfeit. That this self-celebrated Astronomer, Mathematician, and Professor of Astrology, &c. never did calculate the Eclipses, the New, Full, and Quarter Moons, nor the Moon's rising and setting, &c. for that Work; nor is he capable of doing them." From the above it evidently appears, that the original and true Performance still remains in the Hands of the Company of Stationers, who have from Time to Time employed, since the Decease of the ingenious Mr. Francis Moore, such Hands as they thought most proper for a Work of that Consequence. The present Writer (unacquainted with the above-said Authors) wishes not to enter into any Dispute: but, following the Steps of his great Predecessor, as far as his Abilities will admit, will at all Times endeavour not to deceive the Credulous and Unwary with Suppositions counterfeit and spurious; but write only such Things as are founded upon Facts, or built upon the firm Basis of judicial Astrology, as delivered by the Ancients, and verified by long Experience. For which Reason I shall here lay down a Set of the best Rules for judging of, and predicting, the Weather by the Barometer, which Facts and Experience have yet furnished us with. These Rules, which may be called *Philosophical*, together with the *Astrological* Ones contained in the last Column of the first Page of each Month in the following Calendar, will form a true and complete Diary of the Weather for the whole Year; very useful to all Farmers, Travellers, Seamen, and in short all Persons, whether they be sick or in Health; for hence the Physician and his Patients may regulate the Course of their Medicines; hence the Countryman may assure himself of the approaching State of the Weather, and regulate accordingly his Plowing, Sowing, and Reaping; hence the Traveller may know when to make his Journey in the best Weather; and hence even the Fair Sex may know when the Weather, smiling like themselves, will render their Walk delightful. For, like as the astrological Predictions of the Weather enable us to know the general State of it at any Distance of Time, and for large extended Continents and Nations; so the Indications of the Barometer, or Weather-glass, serve on short Notices, and for a few Days, and are commonly the Effect of partial and temporary Variations and Changes in the Weather, as regulated by the Stars and Planets, produced by Winds and the peculiar Situations

Situations of Countries as to Seas and Lands, Latitude and Longitude. These Rules, which are the latest that have been made, are adapted to our Isle by the ingenious Mr. Patrick, and are as follows:

RULES FOR THE WEATHER BY THE BAROMETER.

RULE 1. The rising of the Merc. presages, in general, fair Weather; and its falling, foul Weather, as Rain, Snow, high Winds, and Storms.

2. In very hot Weather, the falling of the Mercury indicates Thunder.

3. In Winter, the rising presages Frost; and in frosty Weather, if the Mercury fall three or four Divisions, there will certainly follow a Thaw; but, in a continual Frost, if the Mercury rise, it will certainly snow.

4. When foul Weather happens soon after the falling of the Mercury, expect but little of it; and, on the contrary, expect but little fair Weather when it proves fair shortly after the Mercury has risen.

5. In foul Weather, when the Mercury rises much and high, and so continues for two or three Days before the foul Weather is quite over, then expect a Continuance of fair Weather to follow.

6. In fair Weather when the Mercury falls much and low, and thus continues for two or three Days before the Rain comes, then expect a great deal of Wet, and probably high Winds.

7. The unsettled Motion of the Mercury denotes uncertain and changeable Weather.

8. You are not so strictly to observe the Words engraved on the Plates (though for the most Part it will agree with them), as the Mercury's rising and falling; for if it stands at much Rain, and then rises up to changeable, it presages fair Weather, although not to continue so long as it would have done, if the Merc. were higher, and so, on the contrary, if the Merc. stood at fair, and fall to changeable, it presages foul Weather, though not so much of it as if it had sunk down lower.

From these Observations it appears, that it is not so much the Height of the Mercury in the Tube, that indicates the Weather, as the Motion of it up and down: Wherefore, in order to pass a right Judgment of what Weather is to be expected, we ought to know whether the Merc. is exactly rising or falling, to which End the following Rules are of Use.

(1st) When the Surface of the Mercury is convex, standing higher in the Middle of the Tube than at the Sides, it is a Sign that the Mercury is then rising.

(2d.) When the Surface of the Mercury is concave, or hollow in the Middle, it is sinking. And

(3d.) When it is plain or level, or rather a very little convex, the Mercury is stationary.

(4th.) When the Glass is small, shake the Tube; then, if the Air be grown heavier, the Mercury will rise about half a Division higher than it stood before; but, if it be grown lighter, it will sink so much. This proceeds from the Mercury sticking to the Sides of the Tube, which prevents the free Motion of it, until it be disengaged by the Shock. Therefore when an Observation is to be made by such a Tube, it ought always to be shaken first: for sometimes the Mercury will not vary of its own accord, until the Weather arrive which it ought to have predicted.

No Draught from fam'd Parnassus Stream,
 Or fabled Song, the Muse requires;
 The God of Seasons is her Theme,
 And Nature all around inspires;
 Wherever we tread, whatever we hear or see,
 Great First and Last, to chant the Praise of thee.

M D	W D	Fasts and Festivals	☉ W	☿ Signs	☽ A	☽ rises and sets	Mutual Asp. and Weather.
1	T	Circumcision	12	feet	6	9 a 36	Dark and
2	F		13	toes	7	10 41	☐ ♀
3	S		14	head	8	11 46	cloudy wea-
4	D	2 S. aft. Christ.	15	and	9	morn	ther.
5	M	Old Christm. d.	16	face	10	0 54	Frosty.
6	T	Epiphany	17	neck	11	2 4	Twelfth-day
7	W		18	throat	12	3 14	* ♀
8	T	Lucian	19	arms	13	4 25	Windy, but
9	F		20	should.	14	5 30	dark and
10	S		21	breast	15	6 26	cloudy for
11	D	1 S. aft. Epiph.	22	stom.	F	☽ rises	some time
12	M	Plow Monday	23	heart	17	5 a 42	Old N. Y. day.
13	T	Hilary	24	back	18	7 8	Camb. Term beg.
14	W	Oxf. Term beg.	25	bowels	19	8 31	8 ☉ 4
15	T		26	belly	20	9 53	6 ♂ 8
16	F		27	reins	21	11 13	Var. weather.
17	S	O. Twelfth d.	28	loins	22	morn	8 4 8
18	D	2 S. aft. Epiph.	29	Prisca	23	0 30	Q. Ch. n. d. k.
19	M		30	secret	24	1 45	8 4 8
20	T	Fabian.	1	memb.	25	2 55	More mild,
21	W	Agnes.	2	hips	26	3 58	6 ☉ 8
22	T	Vincent.	3	thighs	27	4 52	but conti-
23	F	Hilary Term b.	4	knees	28	5 38	nues not
24	S		5	and	29	6 17	long.
25	D	3 S. aft. Epiph.	6	hams	30	6 48	Con. St. Paul
26	M		7	legs	N	☽ sets	Now dark,
27	T	Pr. Aug. Fr. b.	8	ankles	2	6 a 14	but cold.
28	W		9	feet	3	7 17	* ♀
29	T		10	and	4	8 21	Continues
30	F	K. C. I. mart.	11	toes	5	9 25	variable to
31	S		12	head	6	10 32	the end.

The 11 day, at 1^h aftern. Jupiter
 The 23 day, at 10 morn. Venus
 The 25 day, at 3 aftern. Mars
 The 26 day, at 3 morn. Mercury
 The 28 day, at 6 aftern. Saturn

is with
the Moon.

M D	Sun rises	Sun sets	Moon Souths
1	8 4	3 56	3 a 40
2	8 4	3 56	4 22
3	8 3	3 57	5 3
D 4	8 2	3 58	5 46
5	8 2	3 58	6 32
6	8 1	3 59	7 21
7	8 0	4 0	8 14
8	7 59	4 1	9 11
9	7 58	4 2	10 1
10	7 57	4 3	11 13
D 11	7 56	4 4	morn.
12	7 55	4 5	0 13
13	7 54	4 6	1 11
14	7 52	4 8	2 7
15	7 51	4 9	3 0
16	7 50	4 10	3 52
17	7 49	4 11	4 42
D 18	7 47	4 13	5 32
19	7 46	4 14	6 23
20	7 45	4 15	7 14
21	7 43	4 17	8 5
22	7 42	4 18	8 56
23	7 40	4 20	9 46
24	7 39	4 21	10 35
D 25	7 37	4 23	11 22
26	7 36	4 24	0 a 6
27	7 34	4 26	0 48
28	7 33	4 27	1 30
29	7 31	4 29	2 11
30	7 29	4 31	2 53
31	7 28	4 32	3 35

Monthly Observations.

Astra voluntatem hominis, et liberum arbitrium indirecte et per accidens agunt dam directe temperatum significant et disponunt,

FIRST Quar. 4 day, at 4 aftern.

Sensusque inconsumum trahunt.

To speak modestly, yet shrewdly, be-
 speaks a sound Head and a good Heart.
 But as there are Quack: in Physic, in Law,
 nay even in Divinity, who make great
 boast with little or no Knowledge, as
 shallow Streams make the greatest Noise;

FULL Moon 11 day, at 6 aftern.

so I know no better Criterion to judge of
 Impostors by, than the foregoing Rule;
 that when we are imposed upon by large
 Pretences, and high sounding Words, we
 may be upon our Guard against the Pre-
 tensions of ignorant Deceivers.

LAST Quar. 18 day, at 9 morn.

As is the Case with the other Arts and
 Sciences, so also it is with that celestial
 Science of Astrology; nor is it to be
 marvelled at, when we consider the in-
 nate Desire implanted in Nature to look
 into the hidden Things of futurity, that
 vile Impostors and ignorant Pretenders
 should set up for Professors of an Art, the

NEW Moon 26 day, at 6 morn.

Darling of Antiquity, and the Admiration
 of Princes; when at the same Time it
 appears, by their annual Productions,
 that they are not able to express their
 crude Conceptions even grammatically.

Ye Sons of Art, how vain your Trust,
 Who raise the Arch triumphant high:
 The column moulders into Dust,
 While Time on his swift Wings does fly,
 Through ages onward till the very Spot,
 Where once it proudly rear'd, shall be forgot.

MW	Fasts and	☉	D's	D	D rises	Mutual Asp.
D D	Festivals	☿	Signs	A	and sets	and Weather.
1 D	S. aft. Epiph.	13	face	7	11 a 41	Windy,
2 M	Cand. day Purif	14	neck	8	morn	with some
3 T	Blase	15	and	9	0 49	downfall;
4 W		16	throat	10	1 56	and weather
5 T	Agatha	17	arms	11	3 4	upon the
6 F		18	should.	12	4 4	whole not
7 S		19	breast	13	4 55	8 24 ♀
8 D	Septuages. S.	20	stom.	14	5 39	much dif-
9 M		21	heart	15	6 14	ferent from
10 T		22	back	F	D rises	the former
11 W		23	bowels	17	7 a 18	month, ef-
12 T	Hilary T. ends	24	belly	18	8 43	pecially at
13 F	O. Candl. Day.	25	reins	19	10 4	♂ ♀
14 S	Valentine	26	loins	20	11 22	the begin-
15 D	Sexages. S.	27	secret	21	morn	ning, viz.
16 M		28	memb.	22	0 38	cold winds,
17 T		29	hips	23	1 44	snow, or
18 W		30	thighs	24	2 44	rain, and
19 T		1	knees	25	3 34	slabby wea-
20 F		2	and	26	4 14	Δ 24 ♂
21 S		3	hams	27	4 49	ther.
22 D	Quinquag. or Shrove S.	4		28	5 16	Weather
23 M		5	ankles	29	5 41	unsettled,
24 T	Shrove Tuefd.	6	St. Mar.	30	6 1	Pr. Ad. Fr. b.
25 W	Ash Wednesd.	7	feet	N	D sets	and so con-
26 T		8	toes	2	7 a 18	tinues to the
27 F		9	head	3	8 25	end.
28 S		10	face	4	9 32	

The 8 day, at 4 morn. Jupiter
 The 22 day, at 7 aftern. Venus
 The 23 day, at 7 aftern. Mars
 The 25 day, at 1 aftern. Saturn
 The 26 day, at noon, Mercury

is with
 the Moon.

M D	Sun rises	Sun sets	Moon Souths	Monthly Observations.
D	7 26	4 34	4 a 19	To Authors of this Stamp, whose
2	7 24	4 36	5 6	Writings only serve to betray their Igno-
3	7 23	4 37	5 56	FIRST Quar. 3 day, at 9 morn.
4	7 21	4 39	6 49	rance, it may be truly said,
5	7 19	4 41	7 46	Cease, Scribbler, cease; why all this
6	7 17	4 43	8 45	mighty Pains,
7	7 15	4 45	9 46	To tell the World the Lord deny'd thee
D	7 14	4 46	10 45	Brains?
9	7 12	4 48	11 43	Should the vain Impostor pretend it is
10	7 10	4 50	morn	the thirst of Fame inspires him, fondly
11	7 8	4 52	0 40	FULL Moon 10 day, at 4 morn.
12	7 6	4 54	1 34	imagining that his Works shall survive
13	7 4	4 56	2 27	him, and keep his Name in remembrance,
14	7 3	4 57	3 20	when his Body shall be laid in Dust; to
D	7 1	4 59	4 13	such a one the following Lines of the ce-
16	6 59	5 1	5 6	lebrated Mr. Pope, are justly applicable:
17	6 57	5 3	5 58	LAST Quar. 16 day, at 10 night
18	6 55	5 5	6 50	If raviſh'd with the whistling of a
19	6 53	5 7	7 41	Name,
20	6 51	5 9	8 30	See Cromwell damn'd to everlasting
21	6 49	5 11	9 18	Fame.
D	6 47	5 13	10 3	And in pity to his Ignorance we may
23	6 45	5 15	10 47	honestly add this sage Advice:
24	6 43	5 17	11 29	Forbear to write, content thyself to
25	6 41	5 19	0 a 11	read;
26	6 39	5 21	0 53	An Ass in Lion's skin's an Ass indeed.
27	6 38	5 22	1 35	NEW Moon 25 day, at 1 morn.
28	6 36	5 24	2 19	But we shall here leave the self-im-
				portant Prognosticator, and his deluded
				Readers, with the following Reflection:
				<i>Quis vult decipi decipiatur.</i>

Then, Artift, of thy Work, oh! spare
 To praife, and call it firm and good:
 Its Walls let Babylon declare,
 Or fay ye now where Troy Town flood;
 Thofe Turrets once fo proudly rear'd on high,
 Long in Oblivion funk, for ever hid they lie.

M D	W D	Fafts and Festivals	☉	☿	♂	♂	♂	Mutual Alp. and Weather.
1	D	S. in Lent.	11	neck	5	10	2 39	David
2	M	Chad	12	and	6	11	48	Gloomy
3	T		13	throat	7		morn	♂ ☉ ♀
4	W	Ember Week.	14	arms	8	0	54	weather
5	T		15	should.	9	1	53	with snow
6	F		16	breast	10	2	46	or rains.
7	S	Perpetua	17	stom.	11	3	33	Δ 24 ♀
8	D	2 S. in Lent.	18	heart	12	4	10	♂ ☉ ♀
9	M		19	back	13	4	42	Δ ☉ 24
10	T		20	bowels	14	5	11	Wind with
11	W		21	belly	F	D	rises	fnw or rain.
12	T	Gregory	22	reins	16	7	2 39	♂ ♀ ♀
13	F		23	loins	17	9	0	Frost with
14	S		24	secret	18	10	19	storms driving
15	D	3 S. in Lent.	25	memb.	19	11	33	in many
16	M		26	hips	20		morn	places.
17	T	St. Patrick	27	and	21	0	38	♂ ♂ ♀
18	W	Edw. K. W. S.	28	thighs	22	1	32	♂ ♂ ♀
19	T		29	knees	23	2	16	♂ ♀ ♀
20	F		☿	hams	24	2	55	Great alte-
21	S	Benedict	1	legs	25	3	26	ration about
22	D	Midlent S.	2	and	26	3	50	the new
23	M		3	ances	27	4	13	moon
24	T		4	feet	28	4	34	♂ ♀ ♀
25	W	Lady-day.	5	toes	29	4	53	♂ ♀ ♂
26	T		6	head	N	D	fets	Δ 24 ♀
27	F		7	and	2	7	2 31	Stormy wea-
28	S		8	face	3	8	39	ther, with
29	D	5 S. in Lent.	9	neck	4	9	52	cold hail or
30	M		10	throat	5	10	54	fnw.
31	T		11	arms	6	11	56	Δ 24 ♂

The 7 day, at 11 morn. Jupiter
 The 24 day, at 3 aftern. Mercury
 The 24 day, at 11 aftern. Mars
 The 25 day, at 2 morn. Saturn
 The 25 day, at 4 morn. Venus

is with
 the Moon.

M D	Sun rises	Sun sets	Moon Souths	Monthly Observations.
D	6 34	5 26	3 a 5	To enumerate the Aspects of the fore- going Months, is an easy Task; but to draw an Inference from the whole, just
2	6 32	5 28	3 54	FIRST Quar. 4 day, at 11 night.
3	6 30	5 30	4 45	and indubitable, is what I believe no mo- dest Astrologer will pretend unto. The
4	6 28	5 32	5 39	Quantity, the Variety and Contrariety of
5	6 26	5 34	6 35	the Aspects, as well as the different
6	6 24	5 36	7 33	Natures of the Bodies which form them,
7	6 22	5 38	8 31	bring such a mysterious Scene, before our
D	6 20	5 40	9 28	FULL Moon 11 day, at 2 aftern.
9	6 18	5 42	10 25	Eyes, as surpasseth the Depth of human
10	6 16	5 44	11 20	Understanding, and nothing but the Hand
11	6 14	5 46	morn 15	of Time can unravel; and this only for us
12	6 12	5 48	0 9	to wait with Patience, until the Finger
13	6 10	5 50	1 4	of God shall point out the Event. True
14	6 8	5 52	2 59	it is, that <i>The Heavens declare the Glory of</i>
D	6 6	5 54	3 54	<i>God, and the Firmament sheweth his won-</i>
16	6 4	5 56	4 48	LAST Quar. 18 day, at 2 aftern.
17	6 2	5 58	5 40	<i>drous Works.</i> But at the same Time it is
18	6 0	6 0	6 31	also to be observed, that <i>His Works are</i>
19	5 58	6 2	7 20	<i>past finding out.</i> Sense and Silence are
20	5 56	6 4	8 7	particular Friends, and it is much better to
21	5 54	6 6	8 52	bridle the Tongue than to talk at random.
D	5 52	6 8	9 35	The most that can justly be said is, that
23	5 50	6 10	10 17	as we foretold no great good to the World
24	5 48	6 12	10 59	in general at the Conclusion of the old
25	5 46	6 14	11 41	NEW Moon 26 day, at 7 aftern.
26	5 44	6 16	0 a 25	Year, so neither do we foresee any pro- mising Prospect of the Advent of the
27	5 42	6 18	1 11	present One. Certainly the beginning
28	5 40	6 20	1 59	will be a busy, if not a mischievous one,
D	5 38	6 22	2 50	and the great Variety of Aspects bespeak
30	5 36	6 24	3 43	
31	5 34	6 26		

Search every Land in every Coast,
Through the wide Circuit of the Sun;
Little, I ween, has Man to boast,
And yet behold that little done :
Ah, very soon shall vanish from our Eyes,
Like Shades of Night when Sol begins to rise.

M	W	Fasts and Festivals	☉	D's	D	D rises	Mutual Asp.
D	D		☿	Signs	A	and sets	and Weathers
1	W		12	should.	7	morn	Variable.
2	T		13	breast	8	0 51	♂ ♀ ☿
3	F	<i>Richard</i>	14	stom.	9	1 38	<i>Cam. Ter. ends.</i>
4	S	<i>St. Ambrose</i>	15	heart	10	2 16	<i>Oxf. T. ends.</i>
5	D	<i>Palm Sun. Old</i>	16	and	11	2 50	Windy.
6	M	<i>[Lady D.]</i>	17	back	12	3 19	Δ ♀ ☿
7	T		18	bowels	13	3 45	Expect some
8	W		19	belly	14	4 10	seasonable
9	T	<i>Maundy Thursd.</i>	20	reins	F	D rises	☐ ☉ ♀
10	F	<i>Good Friday</i>	21	loins	16	7 a 58	showers.
11	S		22	secret	17	9 16	More mild
12	D	<i>Easter day</i>	23	memb.	18	10 26	rain may be
13	M	<i>Easter Mond.</i>	24	hips	19	11 28	expected;
14	T	<i>Easter Tuesd.</i>	25	thighs	20	morn	afterward
15	W		26	knees	21	0 19	pleasant and
16	T		27	and	22	1 0	good spring-
17	F		28	hams	23	1 33	♂ ♂ ☿
18	S		29	legs	24	2 0	ing weather,
19	D	<i>Low S. Alphege</i>	30	ankles	25	2 24	until the lat-
20	M		1	feet	26	2 46	ter end of
21	T		2	and	27	3 5	☐ ♀ ☿
22	W	<i>Ox. and C. T. b.</i>	3	toes	28	3 24	the month;
23	T	<i>St. George</i>	4	head	29	3 45	which will
24	F		5	face	30	4 6	be conclu-
25	S	<i>St. Mark</i>	6	neck	N	D sets	<i>Prs. Mary b.</i>
26	D	<i>2 S. aft. Easter</i>	7	throat	2	8 a 50	ded with
27	M		8	arms	3	9 56	rain or hail,
28	T		9	shoul-	4	10 53	and brisk
29	W	<i>Easter T. leg.</i>	10	ders	5	11 43	☐ ♀ ☿
30	T		10	breast	6	morn	winds.

The 3 day, at 8 aftern. Jupiter
 The 21 day, at 9 aftern. Saturn
 The 23 day, at 5 morn. Mars
 The 23 day, at 2 aftern. Mercury
 The 24 day, at 2 aftern. Venus

is with
 the Moon.

M D	Sun lines	Sun fets	Moon Souths	Monthly Observations.
1	5 32	6 28	4 a 38	great Expectations, and no small Disappointments.
2	5 30	6 30	5 34	
3	5 28	6 32	6 30	FIRST Quar. 3 day, at 8 morn.
4	5 26	6 34	7 26	The Year is ushered in with some eminent Configurations, and mostly of the malign kind. Upon one of these, at the latter End of March, take the Words of <i>Avenarius</i> , who says:
D 5	5 24	6 36	8 21	
6	5 22	6 38	9 15	
7	5 20	6 40	10 8	
8	5 18	6 42	11 2	FULL Moon 9 day, at 11 night.
9	5 17	6 43	11 57	
10	5 15	6 45	morn	Nam si aspexerit Mars opposito Aspectu aut Quarto, tunc convertetur Mundus in Bellorum Copiam: that is, When <i>Mars</i> beholds <i>Saturn</i> by Square or Opposition, the World will be involved in Wars and Bloodshed. But happily, instead of an Opposition, we have a Conjunction; therefore, as an Opposition and a Conjunction
11	5 13	6 47	0 52	
D 12	5 11	6 49	1 47	
13	5 9	6 51	2 43	
14	5 7	6 53	3 38	LAST Quar. 17 day, at 8 morn.
15	5 5	6 55	4 31	
16	5 3	6 57	5 21	are the Reverse to each other, methinks it is both easy and rational to reverse the Sentence, and to say, that the World will not be altogether immersed in Wars and Bloodshed; yet, I believe, some Part of it will.—There shall be Wars and Rumours of Wars; but the End is not yet.—Long
17	5 1	6 59	6 9	
18	4 59	7 1	6 55	
D 19	4 57	7 3	7 39	
20	4 56	7 4	8 21	NEW Moon 25 day, at 10 morn.
21	4 54	7 6	9 3	
22	4 52	7 8	9 45	before that Time shall I drop into my Grave, and my Name be held no more in Remembrance among the Sons of Men. May all obey that solemn Call; The silent Grave waits for us all.
23	4 50	7 10	10 28	
24	4 48	7 12	11 13	
25	4 46	7 14	0 a 1	
D 26	4 45	7 15	0 52	
27	4 43	7 17	1 45	
28	4 41	7 19	2 40	
29	4 39	7 21	3 36	
30	4 37	7 23	4 32	

Your Pyrotecnic Arts prepare;
 Your boasted Lights, see how they fly;
 Hark! how they rattle through the Air,
 And ravish'd view them soaring high.
 God sends a Comet; see the mighty Odds,
 Then own how mean your Works compar'd with God's.

M	W	Fasts and Festivals	☉	☽	☿	♂	♀	Mutual Asp. and Weather.
D	D		8	Signs	A	and sets		
1	F	St. Phil. & Ja.	11	stom.	7	om 23		May ap-
2	S		12	heart	8	o 57		pears to
3	D	3 S. aft. Easter	13	back	9	1 27		<i>Inv. of Cross.</i>
4	M		14	bowels	10	1 53		begin with
5	T		15	belly	11	2 17		fine showers,
6	W	<i>J. Ev. A. P. L.</i>	16	reins	12	2 42		after some
7	T		17	loins	13	3 7		time, strong
8	F		18	secret	14	3 37		winds and
9	S		19	memb.	F	☿ rises		some dark
10	D	4 S. aft. Easter	20	hips	16	9 a 17		* ☉ ♀
11	M		21	thighs	17	10 12		and wet
12	T	Old May-day	22	knees	18	10 56		♂ ♀ ☿
13	W		23	and	19	11 35		* ♀ ☿
14	T		24	hams	20	morn		weather.
15	F		25	legs	21	o 5		♂ ☉ ♀, * ☉ 24
16	S		26	ankles	22	o 29		* ♀ ☿, * ♀ ☿
17	D	Rogation S.	27	feet	23	o 51		☐ 24 ♂, * 24 ♀
18	M		28	and	24	1 10		
19	T	Q. Charl. b.	29	toes	25	1 30		<i>Dunstan</i>
20	W		☿	head	26	1 50		
21	T	Ascension	☿	face	27	2 11		Sudden
22	F	Prs. Eliz. b.	2	neck	28	2 36		showers.
23	S		3	and	29	3 4		More se-
24	D	Sun. aft. Aste.	4	throat	N	☿ sets		rene.
25	M	<i>East. Term ends</i>	5	arms	2	8 a 52		Hail or rain.
26	T	<i>Augustin Abp.</i>	6	should.	3	9 39		The air in-
27	W	<i>Ven. Bede.</i>	6	breast	4	10 23		clined to
28	T	<i>Oxf. T. ends</i>	7	stom.	5	10 59		☐ ♀ ☿
29	F	K. C. II. Rest.	8	heart	6	11 30		heat.
30	S		9	back	7	11 57		♂ ☉ ♀
31	D	Whit Sunday	10	bowels	8	morn		

The 1 day, at 6 morn. Jupiter
 The 19 day, at 4 morn. Saturn
 The 22 day, at 7 morn. Mars
 The 24 day, at 7 aftern. Venus
 The 25 day, at 10 aftern. Mercury
 The 28 day, at 7 aftern. Jupiter

is with the
Moon.

M D	Sun rises	Sun sets	Moon Souths	Monthly Observations.
1	4 36	7 24	5 a 27	I would not wish any particular town
2	4 34	7 26	6 21	FIRST Quar. 2 day, at 3 aftern.
D	4 32	7 28	7 13	of indeed any particular country to trust
4	4 31	7 29	8 5	to the account of the weather." It is made
5	4 29	7 31	8 57	for the country in general according to the
6	4 27	7 33	9 49	rules laid down in Ptolemy.
7	4 25	7 35	10 43	By letters which I have received from every
8	4 24	7 36	11 38	
9	4 22	7 38	morn	FULL Moon 9 day, at 9 morn.
D	4 21	7 39	0 33	
11	4 19	7 41	1 28	part of the nation, I find that the ancient
12	4 18	7 42	2 22	have upon the whole given their rules very
13	4 16	7 44	3 14	right. I do fairly allow that it will not
14	4 14	7 46	4 4	serve the whole Land of Great-Britain and
15	4 13	7 47	4 51	Ireland, yet I have letters enough to convince
16	4 12	7 48	5 36	the world that as I have for the benefit of
D	4 10	7 50	6 19	LAST Quar. 17 day, at 2 morn.
18	4 9	7 51	7 0	
19	4 7	7 53	7 42	the public kept a correspondence with such
20	4 6	7 54	8 25	a quantity of sensible and observing people,
21	4 5	7 55	9 9	that my predictions are upon the whole
22	4 3	7 57	9 56	verified upon that particular; and there-
23	4 2	7 58	10 45	
D	4 1	7 59	11 37	NEW Moon 24 day, at 10 night.
25	4 0	8 0	0 32	
26	3 58	8 2	1 29	fore shall not run the risk of even hazard-
27	3 57	8 3	2 26	ing the reputation which this performance
28	3 56	8 4	3 22	has long ago acquired, upon any new built
29	3 55	8 5	4 17	scheme, however plausible, which has not
30	3 54	8 6	5 10	stood the test of ancient observations.
D	3 53	8 7	6 1	FIRST Quar. 31 day, at 8 night.

Thou great Copernicus; to thee
 Are Praises due while Time endures;
 And he who made the Orrery
 'Mongst Mortals sure great Fame infures.
 Yes Artists ye have done your Shares no Doubt:
 But trifling yours to his who wheels the Orbs about.

M D	W D	Fasts and Festivals	☉ L	☿ Sig.	D A	D rises & sets	Mutual Asp. and Weather
1	M	Whit Monday	11	belly	9	o m 21	<i>Nicomede</i>
2	T	Whit Tuesday	12	reins	10	o 46	Pleasant and
3	W	Ember Week	13	loins	11	1 10	warm
4	T	K. Geo. III. b.	14	secret	12	1 36	Weather,
5	F	Pr. Er. Aug. b.	15	mem-	13	2 7	<i>Boniface.</i>
6	S		16	bers	14	2 43	apparently
7	D	Trinity Sund.	17	hips	F	D rises	will be fol-
8	M		18	thighs	16	8 a 47	lowed with
9	T		19	knees	17	9 29	refreshing
10	W	<i>Oxf. Term beg.</i>	20	hams	18	10 2	☐ ♀
11	T	St. Barnabas	21	legs	19	10 29	<i>Corpus Christi</i>
12	F	<i>Trin. Term beg</i>	22	and	20	10 52	Rain, perhaps
13	S		23	ankles	21	11 12	☐ ☉ ♀
14	T	<i>Trin.</i>	24	feet	22	11 31	Thunder
15	M		25	toes	23	11 50	about this
16	T		26	head	24	morn	Time, but
17	W	<i>St. Alban</i>	27	and	25	o 10	upon the
18	T		28	face	26	o 33	△ ♀
19	F		28	neck	27	o 59	whole
20	S	<i>Tr. Ed. K. W. S.</i>	29	throat	28	1 30	agreeable
21	D	2 S. aft. Trin.	28	arms	29	2 9	<i>Longest Day.</i>
22	M		1	should	30	2 58	* ♀ ♂
23	T		2	breast	N	D sets	Weather.
24	W	<i>Nat. of J. Bap.</i>	3	stom.	2	8 a 51	<i>Midsummer</i>
25	T		4	heart	3	9 28	Windy, and
26	F		5	back	4	9 56	Showers.
27	S		6	bowels	5	10 21	Sultry
28	D	3 S. aft. Trin.	7	belly	6	10 45	toward the
29	M	St. Peter	8	reins	7	11 9	Conclusion.
30	T		9	and	8	11 34	* ♂ ♀

The 15 day, at 3 aftern. Saturn
 The 20 day, at 7 morn. Mars
 The 23 day, at 6 aftern. Venus
 The 25 day, at 1 morn. Mercury
 The 25 day, at 10 morn. Jupiter

} is with the
 Moon.

M D	Sun rises	Sun sets	Moon Souths
1	3 52	8 8	6 a 52
2	3 51	8 9	7 43
3	3 51	8 9	8 34
4	3 50	8 10	9 26
5	3 49	8 11	10 20
6	3 48	8 12	11 14
D	3 48	8 12	morn
8	3 47	8 13	0 8
9	3 46	8 14	1 1
10	3 46	8 14	1 52
11	3 45	8 15	2 41
12	3 45	8 15	3 27
13	3 44	8 16	4 10
D	3 44	8 16	4 52
15	3 44	8 16	5 33
16	3 43	8 17	6 15
17	3 43	8 17	6 58
18	3 43	8 17	7 43
19	3 43	8 17	8 30
20	3 43	8 17	9 21
D	3 43	8 17	10 15
22	3 43	8 17	11 11
23	3 43	8 17	0 a 9
24	3 43	8 17	1 7
25	3 43	8 17	2 4
26	3 44	8 16	2 59
27	3 44	8 16	3 52
D	3 44	8 16	4 43
29	3 45	8 15	5 34
30	3 45	8 15	6 25

Monthly Observations.

I perceive in perusing several ancient pieces of this signature, some of which were written by the ingenious Mr. Moore himself, that the monthly observations were not taken up with predictions from every aspect which that month produced, but with pertinent remarks upon the whole;

FULL Moon 7 day, at 8 night.

interperfed sometimes with the prophecies of Daniel, and the opinions of the best commentators; at other times with remarks from monks, abbots, and ancient fathers, much too good for the time they lived in, of the degeneracy of the age, and the pride, luxury, and ignorance of the

LAST Quar. 15 day, at 7 night.

priests in those days. In this I think they were right at that time, wisely considering that a true judgment of the affairs of the world was not to be made from every aspect; but from the aggregate; and when the company found a man not capable of that; they resigned him over to another

NEW Moon 23 day, at 8 morn.

press. They wrote wisely for that time. *Sed tempora mutantur.* Be it remembered that a certain class put Galileo into the Inquisition for heresy. The present class

FIRST Quar. 29 day, at 12 night.

embrace his tenets. The great Alpha and

To that grand Architect who spoke
 The Word, when lo from ancient night
 And Chaos, new Creation broke,
 While Worlds unnumber'd rose to light
 Each in his Orbit regular to move,
 'Till he shall bid them cease, who order'd them to rove.

M D	W D	Fasts and Festivals	☉ ☽	☿ ♊ ♋ ♌ ♍ ♎ ♏ ♐ ♑ ♒ ♓	☿ ♊ ♋ ♌ ♍ ♎ ♏ ♐ ♑ ♒ ♓	☿ ♊ ♋ ♌ ♍ ♎ ♏ ♐ ♑ ♒ ♓	Mutual Asp. and Weather
1	W	Tr. Term. ends.	10	loins	9	morn	The Month
2	T	Visit. B. V.M.	11	secret	10	o 6	begins
3	F	Dogs days begin	12	memb.	11	o 37	with hot wea-
4	S	Tr. St. Martin	13	hips	12	1 18	Δ ♄ ♀
5	O	S. aft. Trin.	14	thighs	13	2 10	Old Midsum. d.
6	M		15	knees	14	3 2	ther in
7	T	T. & Becket Cam.	16	and	F	☿ rises	earnest, which
8	W	[Com.	17	hams	16	8 a 25	♄ ♀ ♀
9	T		18	legs	17	8 50	in all probabi-
10	F	Camb. T. ends	18	ankles	18	9 12	* ♄ ♀
11	S	S. aft. Trin.	19	feet	19	9 32	lity produce
12	O		20	and	20	9 50	Thunder
13	M	Oxford Ad	21	toes	21	10 11	and turbulent
14	T		22	head	22	10 31	♄ ☉ ♄, Δ ♄ ♀
15	W	Switbin.	23	face	23	10 55	Δ ☉ ♄
16	T		24	neck	24	11 24	♄ ♄ ♀
17	F		25	throat	25	11 58	air at or near
18	S	Oxf. Term ends	26	arms	26	morn	the full moon;
19	O	S. aft. Trin.	27	shoul-	27	o 42	* ♄ ♀
20	M	Margaret	28	ders	28	1 36	more calm &
21	T		29	breast	29	2 42	seasonable,
22	W	Magdalen.	☿	stom.	N	☿ sets	with some
23	T		1	heart	1	7 a 54	cooling snow-
24	F		2	back	3	8 22	ers, very
25	S	St. James	3	bowels	4	8 48	acceptrable.
26	O	S. aft. Trin.	4	belly	5	9 11	St Anne's Eve
27	M		5	reins	6	9 37	And the Knū
28	T		6	loins	7	10 6	bids fair to
29	W		7	secret	8	10 38	produce a
30	T		8	memb.	9	11 17	moderately
31	F		9	hips	10	morn	good Harvest.

The 12 day, at 11 aftern. Saturn

The 19 day, at 7 morn. Mars

The 21 day, at 11 aftern. Mercury

The 23 day, at 6 morn. Jupiter

The 23 day, at 5 aftern. Venus

} is with the
Moon.

Mr D	Sun rises	Sun sets	Moon Souths
1	3 46	8 14	7 2 18
2	3 46	8 14	8 9
3	3 47	8 13	9 2
4	3 47	8 13	9 56
D	3 48	8 12	10 49
6	3 49	8 11	11 49
7	3 49	8 11	morn
8	3 50	8 10	0 29
9	3 51	8 9	1 16
10	3 52	8 8	2 0
11	3 53	8 7	2 43
D	3 54	8 6	3 25
13	3 55	8 5	4 6
14	3 56	8 4	4 48
15	3 57	8 3	5 31
16	3 58	8 2	6 16
17	3 59	8 1	7 4
18	4 0	8 0	7 56
D	4 2	7 58	8 51
20	4 3	7 57	9 48
21	4 4	7 56	10 47
22	4 5	7 55	11 46
23	4 7	7 53	0 44
24	4 8	7 52	1 39
25	4 10	7 50	2 33
D	4 11	7 49	3 26
27	4 12	7 48	4 18
28	4 14	7 46	5 11
29	4 15	7 45	6 4
30	4 17	7 43	6 57
31	4 18	7 42	7 50

Monthly Observations.

Omega has said, that heaven and earth shall pass away; but not one jot or tittle of his word should pass away, till all things were fulfilled. We have had so many proofs in history, both sacred and profane, of the fulfilling the prophecies of ancient writ; that what yet remains to be done,

FULL Moon 7 day, at 9 morn.

we may be as certain of as that which is past; but the how, the where, and the when, are known only to the grand disposer of all events. Inscrutable are the ways of God, and his dealings with mankind are past finding out. And yet we have by degrees a pleasing prospect of that

LAST Quar. 15 day, at 11 morn glorious though distant day, the dawnings of which I flatter myself I now begin to perceive; when religion, philosophy and the glorious love of liberty, shall banish false enthusiasm, gloomy superstition, barbarous ignorance, and most barbarous tyranny from the face of the earth. The late

NEW Moon 22 day, at 4 aftern. commotions in the Western world, however detrimental they may have been to us on this side the Atlantic, together with the great progress which arts and sciences are with hasty strides making among them, have already paved the way for freedom

FIRST Quar. 29 day, at 6 morn, to follow genius in the way to honors, and guide her steps in safety.

Immortal Newton, when to thee
 Was given into Nature's Laws
 To penetrate; and Gravity
 Was well explain'd, yet still the Cause
 Unsearchable, in Darkness still involv'd,
 Was piously into the Will of God resolv'd.

M	W	Fests and Festivals	☉	☾'s Signs	D	D rises & sets	Mutual Asp. and Weather
D	D		☉		A		
1	S	Lammas Day	10	thighs	11	o m 2	good weather
2	D	S. S. aft. Trin.	10	knees	12	o 55	☉ ☉ 24
3	M		11	and	13	1 53	Δ h 8
4	T		12	hams	14	2 55	□ h 8
5	W		13	legs	15	D rises	apparently at
6	T	Transfiguration	14	ances	16	7 a 17	the Beginning,
7	F	Pr. Amelia b.	15	feet	17	7 38	Name of Jesus
8	S		16	and	18	7 58	then about
9	D	S. S. aft. Trin.	17	toes	19	8 17	the Full
10	M	St. Lawrence	18	head	20	8 38	Moon expect
11	T	Prs. Brunsw. b.	19	face	21	9 0	Dog Days end.
12	W	Pr. of Wales b.	20	neck	22	9 28	O. Lammas D.
13	T		21	and	23	9 59	some Rain,
14	F		22	throat	24	10 40	and ruffling
15	S	Assumption	23	arms	25	11 26	Winds and
16	D	S. S. aft. Trin.	24	should.	26	morn	D. of York b.
17	M		25	breast	27	o 23	☉ 24 8
18	T		26	stom.	28	1 32	hasty Showers
19	W		27	heart	29	2 50	probably
20	T		28	back	N	D sets	attended with
21	F	Pr. W. Hen. b.	29	bowels	2	6 a 50	8 h 8
22	S		m	belly	3	7 18	Thunder.
23	D	S. S. aft. Trin.	1	reins	4	7 44	Variable
24	M	St. Barthol.	2	loins	5	8 12	towards the
25	T		3	secret	6	8 43	End of
26	W		4	memb.	7	9 22	the
27	T		5	hips	8	10 7	
28	F	St. Augustine	5	and	9	10 57	☉ ☉ 8
29	S	Beb. of J. Bapt.	6	thighs	10	11 53	
30	D	S. S. aft. Trin.	7	knees	11	morn	* 8 8
31	M		8	hams	12	o 54	Month.

The 9 day, at 4 morn. Saturn
 The 17 day, at 2 morn. Mars
 The 20 day, at 2 morn. Jupiter
 The 20 day, at 9 morn. Mercury
 The 22 day, at noon, Venus

} is with the
 Moon.

M D	Sun rises	Sun sets	Moon Souths
1	4 20	7 40	8 a 43
D	4 22	7 38	9 34
3	4 23	7 37	10 23
4	4 25	7 35	11 10
5	4 26	7 34	11 56
6	4 28	7 32	morn
7	4 30	7 30	0 40
8	4 31	7 29	1 22
D	4 33	7 27	2 4
10	4 35	7 25	2 46
11	4 37	7 23	3 29
12	4 38	7 22	4 13
13	4 40	7 20	5 0
14	4 42	7 18	5 49
15	4 44	7 16	6 41
D	4 45	7 15	7 36
17	4 47	7 13	8 32
18	4 49	7 11	9 30
19	4 51	7 9	10 28
20	4 53	7 7	11 25
21	4 54	7 6	0 a 22
22	4 56	7 4	1 18
D	4 58	7 2	2 13
24	5 0	7 0	3 7
25	5 2	6 58	4 1
26	5 4	6 56	4 56
27	5 6	6 54	5 51
28	5 8	6 52	6 44
29	5 9	6 51	7 36
D	5 11	6 49	8 26
31	5 13	6 47	9 14

Monthly Observations.

It is not a doubt but in succeeding times the present slaves to other nations will with a noble and manly daring, assert their liberties, and break off the shackles which have so long oppressed them. The arts and

FULL Moon 5 day, at 10 night.

sciences never chose to dwell where liberty and freedom had not erected their standard. But alas while the human species are hoodwinked by blind superstition, or tremble under the menaces of cruel tyranny, the soul, however pregnant with celestial fire, has neither means nor power to exert itself. Thus, as the poet justly observes, hands that might have swayed the rod of empire,

LAST Quar. 14 day, at 2 morn.

or waked to extol the living lyre, are now employed in the base service of some unfeeling tyrant.

" While knowledge to their eyes her ample page,
 " Rich with the spoils of time ne'er unroll;

NEW Moon 20 day, at 11 night.

" Chill penury suppress'd their noble rage,

" And froze the genial current of the soul.

" Thus many a gem of purest ray serene,

" The dark unfathom'd caves of ocean bear,

FIRST Quar. 27 day, at 3 aftern.

" Thus many a flow'rs is born to blush unseen.

" And waste it's sweetness on the desert air."

The shining Robe of gladdning Day
 Thy Art prismatic brought to Light ;
 While self collected every Ray
 With new Amazement strike the Sight ;
 Red, Orange, Yellow, Green, and pleasing Blue,
 While Indico concludes with Shade of sadder Hue.

M D	W D	Fasts and Festivals	☉ m	☿ Signs	☽ A	☽ rises & sets	Mutual Asp. and Weather
1	T	<i>Giles</i>	9	legs	13	1 m. 59	High Winds
2	W	<i>London burnt</i>	10	an-	14	3 5	and hasty
3	T		11	cles	15	4 10	Showers
4	F		12	feet	F	☿ rises	* ☉ ☽
5	S		13	toes	17	6 a 30	8 h 8
6	D	13 S. aft. Trin	14	head	18	6 52	towards the
7	M	<i>Eunuchus</i>	15	and	19	7 15	Beginning of
8	T	<i>Nat. Virg. M.</i>	16	face	20	7 39	the Month:
9	W		17	neck	21	8 9	the Weather
10	T		18	throat	22	8 45	☐ ☽ ☽
11	F		19	arms	23	9 28	☽ ☉ ☽
12	S		20	should.	24	10 21	more mild;
13	D	14 S. aft. Trin	21	breast	25	11 25	* ☿ ☽
14	M	<i>Holy Cross</i>	22	sto-	26	morn	which may
15	T		23	mach	27	0 36	☿ h ☽
16	W	<i>Ember Week</i>	24	heart	28	1 52	continue
17	T	<i>Lambert</i>	25	back	29	3 15	without much
18	F		26	bowels	30	4 38	Alteration
19	S		27	belly	N	☽ sets	till the
20	D	1 S. aft. Trin	28	reins	2	6 a 21	New Moon.
21	M	St. Matthew	29	loins	3	6 52	Afterwards
22	T	K. Geo. III. cr	☿	secret	4	7 28	I apprehend
23	W		1	memb.	5	8 10	sudden
24	T		2	hips	6	9 0	* ☿ ☽
25	F		3	thighs	7	9 56	Showers, not
26	S	<i>St. Cyprian</i>	4	knees	8	10 57	without rude
27	D	16 S. aft. Trin	5	hams	9	morn	Winds.
28	M		6	legs	10	0 1	☐ ☽ ☽
29	T	St. Michael	7	an-	11	1 1	Ch. Au. M. b
30	W	<i>St. Jerome.</i>	8	cles	12	2 12	Variable to the End.

MOORE. SEPTEMBER, 1789. 25

The 5 day, at 7 morn. Saturn
 The 14 day, at 5 aftern. Mars
 The 16 day, at 10 aftern. Jupiter
 The 20 day, at noon, Mercury
 The 21 day, at 11 morn. Venus

is with the Moon.

M D	Sun rises	Sun sets	Moon Souths
1	5 15	6 45	10 2 0
2	5 17	6 48	10 44
3	5 19	6 41	11 27
4	5 21	6 39	morn
5	5 23	6 37	0 10
D	5 25	6 35	0 52
7	5 27	6 33	1 34
8	5 29	6 31	2 18
9	5 31	6 29	3 4
10	5 32	6 28	3 52
11	5 34	6 26	4 42
12	5 36	6 24	5 35
D	5 38	6 22	6 29
14	5 40	6 20	7 25
15	5 42	6 18	8 21
16	5 44	6 16	9 17
17	5 46	6 14	10 13
18	5 48	6 12	11 8
19	5 50	6 10	0 4
D	5 52	6 8	1 1
21	5 54	6 6	1 57
22	5 56	6 4	2 54
23	5 58	6 2	3 50
24	6 0	6 0	4 45
25	6 2	5 58	5 39
26	6 4	5 56	6 31
D	6 6	5 54	7 21
28	6 8	5 52	8 8
29	6 10	5 50	8 53
30	6 12	5 48	9 37

Monthly Observations.

The generous exertions of my fellow citizens, of all denominations, for the abolition of the Slave Trade, is another convincing proof of the urbanity of their

FULL Moon 4 day, at 2 aftern.

hearts, and their fine feelings for their fellow creatures of all ranks and all complexions.

When the blessed hour of emancipation shall arrive, what joy and gladness will be diffused in the breasts of thousands of our unhappy fellow creatures, who now with agony of heart cry out with the psalmist,

LAST Quar. 12 day, at 3 aftern.

who will shew us any good. And surely every one who reads our Holy Litany with a sincere heart, and who wishes that it may please the Majesty Divine to bless and keep all his people, and to give to all nations

NEW Moon 19 day, at 7 morn.

unity, peace and concord, that all may be brought into the way of truth, who have erred, and are deceived; that he will be pleased to succour, help, and comfort all that are in danger, necessity and tribulation, and shew his pity upon all prisoners

FIRST Quar. 26 day, at 4 morn.

and captives, will join in wishing and endeavouring to extirpate that diabolical business, which has long been a scandal to the Christian world.

Though Error reign'd through Ages past,
 When Epicycles were the Theme;
 Heav'n sent a Newton down at last,
 To shew it all an idle Dream;
 That Stream of Light which o'er the darksome Bed
 Of Ignorance o'erflow'd, still own'd its fountain Head.

M	W	Fasts and Festivals	☉	☿'s Signs	☽	☽ rises & sets	Mutual Asp. and Weather
1	T	<i>Remigius</i>	9	feet	13	3 m 17	About
2	F		10	toes	14	4 21	the Beginning
3	S		11	head	15	5 25	same brisk
4	D	17 S. aft. Trin.	12	and	16	☽ rises	Blasts of
5	M		13	face	17	5 a 53	Wind,
6	T	<i>Faith</i>	14	neck	18	6 22	and perhaps
7	W		15	throat	19	6 55	☐ ♀
8	T		16	arms	20	7 36	some few
9	F	<i>St. Denys [beg.</i>	17	shoul-	21	8 24	Showers,
10	S	<i>Oxf & Cam. T</i>	18	ders	22	9 21	<i>Old Mich. Day</i>
11	D	18 S. aft. Trin.	19	breast	23	10 29	which may
12	M		20	stom.	24	11 40	☐ ♀
13	T	<i>Tr. K. Ed. Conf</i>	21	heart	25	morn	continue
14	W		22	back	26	0 59	with some
15	T		23	bowels	27	2 19	☐ ♀
16	F		24	belly	28	3 40	* ♀
17	S	<i>Estheldred</i>	25	reins	29	5 2	little Varia-
18	D	19 S. aft. Trin.	26	loins	N	☽ set.	Luke * ☉
19	M		27	secret	2	5 a 29	tion till the
20	T		28	memb.	3	6 10	latter End
21	W		29	hips	4	6 56	of the Month
22	T		m	thighs	5	7 51	When cold
23	F		0	knees	6	8 52	Weather,
24	S		1	and	7	9 56	with some
25	D	20 S. aft. Trin.	2	hams	8	<i>Crispin</i>	K. G. III. ac.
26	M	<i>K. Geo. III. pr.</i>	3	legs	9	morn	down fall, &
27	T		4	ankles	10	0 6	☐ ♂ ♀
28	W	<i>St. Sim. & Jude</i>	5	feet	11	1 12	rough Wind
29	T		6	and	12	2 15	conclude the
30	F		7	toes	13	3 20	☐ ♀
31	S		9	head	14	4 25	Month.

The 2 day, at 8 morn. Saturn	} is with the Moon.
The 13 day, at 5 morn. Mars	
The 14 day, at 3 aftern. Jupiter	
The 20 day, at 9 morn. Mercury	
The 21 day, at 10 morn. Venus	
The 29 day, at 1 aftern. Saturn	

M	Sun	Sun	Moon
D	rises	sets	Souths
1	6 14	5 46	10 a 19
2	6 16	5 44	11 0
3	6 18	5 42	11 42
D	6 20	5 40	morn
5	6 22	5 38	0 26
6	6 24	5 36	1 11
7	6 26	5 34	1 58
8	6 28	5 32	2 47
9	6 29	5 31	3 38
10	6 31	5 29	4 31
D	6 33	5 27	5 25
12	6 35	5 25	6 20
13	6 37	5 23	7 14
14	6 39	5 21	8 8
15	6 41	5 19	9 2
16	6 43	5 17	9 56
17	6 45	5 15	10 50
D	6 47	5 13	11 46
19	6 49	5 11	0 a 44
20	6 51	5 9	1 42
21	6 53	5 7	2 39
22	6 55	5 5	3 35
23	6 56	5 4	4 29
24	6 58	5 2	5 20
D	7 0	5 0	6 8
26	7 2	4 58	6 54
27	7 4	4 56	7 38
28	7 6	4 54	8 20
29	7 8	4 52	9 2
30	7 9	4 51	9 44
31	7 11	4 49	10 27

Monthly Observations.

When we shudder at even the most distant apprehension of any invasion upon our own liberties, let us in their case apply the

FULL Moon 4 day, at 7 morn.

golden rule, whatsoever ye would that men should do unto you, do ye even so unto them, for this is the law and the prophets. The precepts of the Gospel, the feelings of humanity, and the natural rights of every son and daughter of Adam, all plead in the behalf of these children of affliction,

LAST Quar. 12 day, at 2 morn.

with souls immortal, and talents capable of the greatest refinement: and I sincerely believe, the great father of all mercies is now about accomplishing this great end,

NEW Moon 18 day, at 4 aftern.

and secretly stirring up the hearts of all his faithful servants to that purpose, to enlighten their understandings, and to raise them from the death of sin unto the life of righteousness, and that this is one means

FIRST Quar. 25 day, at 8 night.

by which his gracious goodness purposes to accomplish the number of his elect, and to hasten his kingdom. It is well worth our observation, that while we are humanely exerting ourselves in the behalf of

The Pace of Sound, when in its Flight
 From Heav'n, dread Thunder shakes the Ground ;
 Th' amazing Race of rapid Light,
 All this the wond'rous Newton found.
 He saw, he prais'd, he wonder'd and ador'd ;
 Then gladly shew'd the Works of Heav'n's high Lord

M	W	Fasts and	☉	☿	♂	♂	♂	Mutual Asp
D	D	Festivals	"	Signs	A	rises	& sets	and. Weathe ^r
1	D	21 S. aft. Trin.	10	face	15	5 m 30		All Saints.
2	M	Pr. Edw. b.	11	neck	16	5 rises		All Sa. Δ 1 8
3	T	Prs. Sophia b.	12	and	17	5 2 1		☿ 8 8
4	W		13	throat	18	5 38		Cold
5	T	Powder Plot	14	arms	19	6 25		☿ 0 8
6	F	Leonard	15	should.	20	7 19		Mich. Term beg
7	S	D. of Cumb. b.	16	breast	21	8 21		Weather.
8	D	22 S. aft. Trin.	17	stom.	22	9 P.		A. S. b. Δ 0 8
9	M	Ld. Mayor's D	18	heart	23	10 46		Mark
10	T		19	back	24	morn		☿ 8, Δ 2 8
11	W	St. Martin	20	bowels	25	0 3		Weather,
12	T		21	belly	26	1 21		with Snow,
13	F	Britius	22	reins	27	2 41		Sleet, or cold
14	S		23	loins	28	4 1		Rain ; then
15	D	23 S. aft. Trin.	24	secret	29	5 22		Macutus
16	M		25	memb.	30	6 40		sharp freezing
17	T	Hugh Bp. Linc.	26	hips	N	D sets		Winds.
18	W		27	and	1	5 2 34		Changeable,
19	T		28	thighs	3	6 33		some Time,
20	F	Edmund K & M.	29	knees	4	7 37		then
21	S		30	hams	5	8 42		☿ 0 2
22	D	24 S. aft. Trin.	1	legs	6	9 49		Cecilia, O. M.
23	M	St. Clement	2	ankles	7	10 55		* 1 8
24	T		3	feet	8	morn		Frost and
25	W	D. of Glo. b.	4	and	9	0 0		Catherine
26	T		5	toes	10	1 4		Δ 1 8
27	F		6	head	11	2 7		Snow.
28	S	Mich. Term ends	7	face	12	3 11		Rough,
29	D	Advent Sun.	8	neck	13	4 16		stormy Winds
30	M	St. Andrew	9	and	14	5 21		conclude the Month.

The 10 day, at 11 morn. Mars	} is with the Moon.
The 11 day, at 5 morn Jupiter	
The 15 day, at 8 aftern. Mercury	
The 20 day, at noon, Venus	
The 25 day, at 7 aftern. Saturn	

M D	Sun rises	Sun sets	Moon South	Monthly Observations.
D 1	7 13	4 47	11 12	these long despised and neglected fellow
2	7 15	4 45	11 59	FULL Moon 2 day, at 12 night.
3	7 17	4 43	morn	
4	7 18	4 42	0 48	
5	7 20	4 40	1 35	creatures, our care has not been wanting
6	7 22	4 38	2 31	towards the relief of every distress, and the
7	7 24	4 36	3 24	growth of every distress, and the growth of
D 7	7 25	4 35	4 17	every christian virtue. While infirmaries or
9	7 27	4 33	5 10	general hospitals are open to the poor, the
10	7 29	4 31	6 3	LAST Quar. 10 day, at 10 morn.
11	7 30	4 30	6 55	
12	7 32	4 28	7 47	diseased and the maimed; where the most
13	7 33	4 27	8 39	skilful of the medicinal faculty daily comb-
14	7 35	4 25	9 32	bat the many maladies that torment the
D 14	7 37	4 23	10 27	human fabric; and by restoring of health,
16	7 38	4 22	11 24	give back to their country useful members,
17	7 40	4 20	0 21	NEW Moon 17 day, at 3 morn.
18	7 41	4 19	1 18	
19	7 42	4 18	2 14	and to particular families the chief sources
20	7 44	4 16	3 8	of their support, while seminaries of use-
21	7 45	4 15	3 58	ful and sound learning are almost every
D 21	7 47	4 13	4 45	where opening for the children of the poor.
23	7 48	4 12	5 30	The establishment of Sunday Schools bids
24	7 49	4 11	6 13	FIRST Quar. 24 day, at 4 aftern.
25	7 51	4 9	6 55	
26	7 52	4 8	7 36	fair for the promotion of religion and piety,
27	7 53	4 7	8 18	and the temporal and spiritual welfare of a
28	7 54	4 6	9 1	rising generation; this spirit of reformation,
D 28	7 55	4 5	9 47	of universal philanthropy, and the
30	7 56	4 4	10 35	care that is taken to inculcate the seeds of
				every infant mind, gives us, the inhabitants

To Newton's Mem'ry. Ages flown
 His Works shall give a deathless Fame ;
 When the frail monumental Stone,
 False to its Trust conceals his Name ;
 And while his Works unfold all Nature's Laws,
 Let us, by Newton taught, adore the great first Cause.

M	W	Fasts and	☉	☿'s	D	D rises	Mutual Asp.
D	D	Festivals	†	Signs	A	& sets	and Weather
1	T		10	throat	15	6 m 26	December
2	W		11	arms	F	D rises	comes in,
3	T		12	should	17	5 a 6	
4	F		13	breast	18	6 9	☐ ♂ ☿
5	S		14	stom.	19	7 16	* ♀ ☿
6	D	2 S. in Adv.	15	heart	20	8 29	Nicholas
7	M		16	back	21	9 44	☐ ☉ ♄, ☐ ♃ ☿
8	T	Concep. V. M.	17	bowels	22	11 1	attended
9	W		18	and	23	morn	with high
10	T		19	belly	24	0 18	Blasts of
11	F		20	reins	25	1 37	Wind, bring-
12	S		21	loins	26	2 53	ing Snow
13	D	3 S. in Adv.	22	secret	27	4 11	Lucy
14	M		23	memb.	28	5 24	or Sleet, and
15	T	[ends	24	hips	29	6 33	right Winter-
16	W	O. Sap. Cam. T.	25	thighs	N	D sets	Ember Week
17	T	Oxf. Term ends	26	knees	2	5 a 0	☐ ♄ ☿
18	F		27	hams	3	6 12	ly Weather.
19	S		28	legs	4	7 20	The most
20	D	4 S. in Adv.	29	and	5	8 26	considerable
21	M	St. Thomas	☿	ankles	6	9 32	Sh. D. ☐ ♃ ☿
22	T		1	feet	7	10 36	Δ ☉ ♃, Δ ☉ ☿
23	W		2	toes	8	11 39	Alterations
24	T		3	head	9	morn	about the
25	F	Christmas Day	4	and	10	0 43	
26	S	St. Stephen	5	face	11	1 45	Δ ♃ ☿, Δ ♂ ☿
27	D	St. John	6	neck	12	2 51	S. aft. Christ.
28	M	Holy Innocens	7	throat	13	3 55	Sixteenth.
29	T		8	arms	14	5 0	Now expect
30	W		9	should.	15	5 56	Frost.
31	T	Silvester	10	breast	16	6 49	

The 8 day, at 9 morn. Mars
 The 8 day, at 2 aftern. Jupiter
 The 15 day, at 8 aftern. Mercury
 The 20 day, at 2 aftern. Venus
 The 23 day. at 5 morn. Saturn

is with the Moon.

M D	Sun rises	Sun sets	Moon Souths
1	7 57	4 3	11 25
2	7 58	4 2	morn
3	7 59	4 1	0 17
4	8 0	4 0	1 11
5	8 1	3 59	2 6
D 6	8 2	3 58	3 0
7	8 3	3 57	3 53
8	8 3	3 57	4 44
9	8 4	3 56	5 35
10	8 5	3 55	6 25
11	8 5	3 55	7 17
12	8 6	3 54	8 8
D 13	8 6	3 54	9 2
14	8 7	3 53	9 57
15	8 7	3 53	10 53
16	8 7	3 53	11 50
17	8 8	3 52	0 44
18	8 8	3 52	1 36
19	8 8	3 52	2 25
D 20	8 8	3 52	3 11
21	8 8	3 52	3 55
22	8 8	3 52	4 37
23	8 8	3 52	5 18
24	8 8	3 52	6 0
25	8 7	3 53	6 42
26	8 7	3 53	7 26
D 27	8 7	3 53	8 12
28	8 6	3 54	9 1
29	8 6	3 54	9 52
30	8 6	3 54	10 46
31	8 5	3 55	11 42

Monthly Observations.

of this life every reason to hope, that our
FULL Moon 2 day, at 5 aftern.

God is with us, and will blefs us, that he will shew us the light of his countenance, and be merciful unto us, while we continue to make his ways known upon earth, and his saving health among all

LAST Quar. 9 day, at 6 aftern.

nations. Let others presumptuously give their ipse dixit upon every celestial aspect, as if they had been of his privy counsel, and were acquainted with the grand arcana of his divine will: the true Christian astro-

NEW Moon 16 day, at 5 aftern.

logy is to contemplate the glory, infinite power, wisdom, goodness, greatness, mercy and love of the great Alpha and Omega, to look with profound reverence upon the grand lines of that divine oeconomy, which maketh war and peace, sunshine and tem-

FIRST Quar. 24 day, at 1 aftern.

pest, discord and love, all concur in one great end. When the son shall have delivered up the kingdom to God, even the Father; for faith holy writ, he must reign till he hath put all enemies under his feet; and the last enemy that shall be destroyed, is death.

The Dominion of the Moon in Man's Body.
 Passing under the Twelve Zodiacal Constellations.

♈ Aries Head and Face	♎ Libra Reins and Loins
♉ Taurus Neck and Throat	♏ Scorpio secret Members
♊ Gemini Arms and shoulders	♐ Sagittary Hips and Thighs
♋ Cancer Breast and Stomach	♑ Capricorn Knees and Hams
♌ Leo Heart and Back	♒ Aquarius Legs and Ancles
♍ Virgo Bowels and Belly	♓ Pisces Feet and Toes

The Names and Characters of the PLANETS

With the Dragon's Head and Tail.

♄ Saturn	} ☉, or the Sun	♀ Venus
♃ Jupiter		☿ Mercury
♂ Mars		☾ the Moon

♈ Dragon's Head.—♏ Dragon's Tail.

The CHARACTERS of the ASPECTS.

♄ Conjunction	} ☿ Opposition	▲ Trine
* Sextile		◻ Quadrile

Upon the TWELVE SIGNS.

- ♈ The Head and Face the *Ram* doth always rule:
- ♉ The Neck and Throat are govern'd by the *Bull*.
- ♊ O'er the Arms and Shoulders still the *Twins* preside:
- ♋ Breast, Stomach, Ribs, the crooked *Crab* doth guide.
- ♌ The noble *Lion* rules the Back and Heart:
- ♍ The bashful *Virgin* claims the Belly Part.
- ♎ The Reins and Loins the equal *Balance* weigh:
- ♏ The *Scorpion* o'er the Secret Parts doth sway.
- ♐ The curious *Archer* doth the Thighs affect:
- ♑ So doth the *Goat* our bended Knees protect.
- ♒ The Legs unto *Aquarius* Lot do fall:
- ♓ The *Fish* our active Feet their Portion call.

Chronology of many remarkable Occurrences.

<i>Years of Christ.</i>		<i>Years since.</i>
1066	William (the Norman) conquered England	723
1185	Ireland conquered by the English	604
1299	Windmills invented	490
1302	The Mariner's Compass invented	487
1304	Edward I. reduced Scotland	485
1330	Gunpowder discovered by a Priest	459
1369	Wickliff first began the Reformation	420
1441	Printing invented by a German	248
1492	Columbus discovered America	297
1517	Luther wrote against Indulgences	272
1521	Engraving on Wood, invented by Alber Durer	268
1535	Canon first used	254
1584	Virginia discovered by Sir Walter Raleigh	205
1590	Telescopes invented by Jansen, a Dutchman	199
1603	Queen Eliz. died, King James succeeded	186
1603	A great Plague in London, died 56,570	186
1603	King James I. crowned July 15, at Westminster	186
1605	The Popish Gunpowder Plot, November 5	184
1608	Saturn's Satellites first discovered	181
1614	The New River brought to London	175
1616	Shakespeare the Poet died	173
1625	A great Plague in London, died 34,517	164
1625	King James died, K. Charles I. crown'd, Feb. 2.	164
1632	A great Fire on London Bridge, Feb. 11	157
1634	Old Parr died, aged 152, he lived in ten Reigns	154
1641	The Earl of Strafford beheaded, May 12	148
1641	The cruel Irish Massacre, began October 23	148
1642	Edgehill and Brentford Fight	147
1642	Sir Isaac Newton born, December 25	147
1649	King Charles I. beheaded	140
1651	The bloody Fight at Worcester	138
1653	Oliver Cromwell made Protector, Dec. 12	136
1655	George Fox, the first of the Quakers	134
1658	Spring Pocket-Watches, invented by Dr. Hook	131
1658	Oliver Cromwell died Sept. 3	131
1660	King Charles II. restored, May 29	129
1661	K. Charles II. crowned, April 23, at Westminster	128
1661	A great Storm in London, Feb. 18	128
1662	The Royal Society instituted	127
1665	A great Plague in London, whereof died 68,586	124
1666	The lamentable Burning of London, Sept. 2	123

1666	War declared against Denmark, Oct. 19 . . .	123
1667	Peace with Holland, France and Denmark . . .	122
1667	The Royal Exchange built	122
1668	Peace proclaimed with Spain, Feb. 12 . . .	121
1669	The Royal Exchange first opened, September 28	120
1670	The Prince of Orange arrives at Whitehall . .	119
1672	War declared against the Dutch	117
1672	Halfpence and farthings first coined, Aug. 16	117
1674	Peace with Holland, proclaimed Feb. 28 . .	115
1677	Prince of Orange married to the Princess Mary	112
1678	The Popish Plot discovered	111
1679	The Habeas-Corpus Act passed	110
1680	A great Comet appeared in December . . .	109
1682	Another great Comet appeared	107
1683	The Penny Post Office established	106
1684	The great Frost that held 13 Weeks	105
1685	K. Charles II. died, and K. James II. succeeded	104
1685	The Duke of Monmouth beheaded, July 15 .	104
1688	{ The seven Bishops sent to the Tower, June 8 }	101
	{ The Pretender said to be born, June 10 }	
1688	Prince of Orange landed at Torbay, Nov. 4. .	101
1688	King James II. abdicated, Dec. 12	101
1689	King William and Q. Mary crowned, April 11	100
1692	Port Royal swallowed up by an Earthquake .	97
1692	A great Earthquake in England, Sept. 8 . .	97
1693	Hackney Coaches first licensed	96
1693	Bank of England first established	96
1694	Lotteries first established	95
1702	K. William died, and Q. Ann began to reign .	87
1702	Queen Anne declared War against France . .	87
1703	A terrible high wind, Nov. 26 and 27 . . .	86
1704	Gibraltar taken by Sir George Rook	85
1706	The Battle at Ramilies on Whit-Sunday . . .	83
1707	England and Scotland united, May 1	82
1708	The Pretender attempted to invade Great-Britain	81
1709	The French beat in the Woods of Blanglies . .	80
1710	Great Riots and Disturbances in England . .	79
1713	Peace with France proclaimed, May 5 . . .	76
1714	Q. Ann died, and Geo. I. began to reign, Aug. 1	75
1715	A total Eclipse of the Sun, April 22	74
	The Rebellion in Scotland and Lancashire . .	74
	A great Frost and Snow. A fair on the Thames	73
	The first Appearance of the Northern Lights	71
	Meteor. March 10. at 8 at Night	70

1726	The great Sir Isaac Newton died, March 20	63
1727	K. George I, died June 11, K. Geo. II. procl.	15 62
1727	An Earthquake in several Parts of England	62
1739	War declared against Spain, Oct. 23	59
1739	Forts of Porto Bello destroyed by Admiral Vernon	50
1739	A hard Frost for 9 Weeks, began Dec. 24	50
1743	The Battle of Dettingen, June 16	46
1744	Anson completed his Voyage round the World	45
1744	War declared by Gr. B. against France, Mar. 31	45
1745	A Rebellion in Scotland	44
1746	The Scotch Rebels defeated at Culloden, Apr. 16	43
1748	A general Peace concluded, October 7	42
1750	Westminster Bridge finished, cost £. 389,500	39
1750	Earthquakes in London, Feb. 8, and Mar. 8	39
1752	The Style and Calendar altered, Sept. 2	37
1755	Lisbon destroyed by an Earthquake	34
1756	War declared against France	33
1758	A large Comet appeared, foretold by Dr. Halley	31
1760	K. Geo. II. died, Oct. 25, K. Geo. III. procl.	26 29
1762	A great Snow for 18 Days together, in Feb.	27
1763	A general Peace proclaimed, March 22	26
1765	Otaheite in the South Seas discovered	24
1765	{ Longitude found by Harrison's Time-piece, } and 18,750 l. given him	24
1765	General Warrants declared illegal	24
1766	Gibraltar almost destroyed by a Storm	23
1770	Blackfriars Bridge finished, cost £. 152,840	19
1772	The Swedes forced to resign their Liberties to the K.	17
1773	The light Gold called in and recoined	15
1775	War declared against North America, Aug. 23	14
1776	The Americans declare themselves independent	13
1778	The French sign a Treaty with the Americans	11
1778	War against France commenced	11
1779	War against Spain begun	10
1780	War against Holland commenced	9
1780	Riots in London, and Gaols burned	9
1785	Spanish Fleet defeated at Gibraltar	9
1781	New Planet discovered by Herschel	8
1782	French Fleet defeated in the West Indies	7
1783	A general Peace	6
1783	Fiery Meteor passed over England, Aug	6
1787	A Commercial Treaty with France concluded	2
1787	Prender's Family extinct by Death of Card. York	2

A TABLE of the Rising, Southing, and Setting of the Pleiades, or Seven Stars, for every 4th Day in the Year, of excellent Use to find the Hour of the Night.

Month & Days	Rise. h m	South h m	Sets. h m	Month & Days	Rise h m	South h m	Sets h m
January { 1 6 11 16 21 26	0 28 0 a 6 11 m 44 11 23 10 52 10 40	8 a 4 8 22 8 c 7 39 7 18 6 56	5 m 2 4 38 4 16 3 55 3 34 3 12	July { 1 6 11 16 21 26	0 m 38 0 18 11 A 57 11 37 11 17 10 57	8 m 54 8 34 8 13 7 53 7 33 7 13	5 a 10 4 50 4 29 4 9 3 49 3 29
February { 1 6 11 16 21 26	10 17 9 56 9 36 9 17 8 58 8 39	6 33 6 12 5 52 5 33 5 14 4 55	2 49 2 28 2 8 1 49 1 30 1 11	August { 1 6 11 16 21 26	10 33 10 14 9 55 9 36 9 17 8 59	6 49 6 30 6 11 5 52 5 33 5 15	3 5 2 46 2 27 2 8 1 49 1 31
March { 1 6 11 16 21 26	8 28 8 10 7 52 7 33 7 15 6 57	4 44 4 26 4 8 3 49 3 31 3 13	1 0 0 42 0 24 0 5 11 a 47 11 29	September { 1 6 11 16 21 26	8 37 8 19 8 1 7 43 7 26 7 8	4 53 4 35 4 17 3 59 3 42 3 24	1 9 0 51 0 33 0 5 11 m 58 11 40
April { 1 6 11 16 21 26	6 35 6 17 5 58 5 40 5 21 5 2	2 51 2 33 2 14 1 56 1 37 1 18	11 7 10 49 10 30 10 2 9 53 9 34	October { 1 6 11 16 21 26	6 50 6 32 6 13 5 54 5 36 5 15	3 6 2 48 2 29 2 10 1 52 1 31	11 22 11 4 10 45 10 26 10 8 9 47
May { 1 6 11 16 21 26	4 43 4 24 4 5 3 45 3 26 2 56	0 59 0 40 0 21 0 1 11 m 42 11 22	9 15 8 56 8 37 8 17 7 58 7 38	November { 1 6 11 16 21 26	4 54 4 34 4 14 3 53 3 28 3 7	1 10 0 50 0 30 0 9 11 a 44 11 23	9 26 9 6 8 46 8 25 8 0 7 39
June { 1 6 11 16 21 26	2 41 2 21 2 1 1 42 1 19 0 5	10 57 10 37 10 17 9 58 9 35 9 15	7 13 6 53 6 33 6 14 5 51 5 1	December { 1 6 11 16 21 26	2 45 2 24 2 2 1 40 1 18 0 56	11 2 10 40 10 18 9 56 9 34 9 12	7 18 6 56 6 34 6 12 5 50 5 28

TABLE of some principal fixed Stars, with the Time they Rise, South, and Set, either before or after the Seven Stars; as also their Colour, Magnitude, and Meridian Altitude, by which they may be readily discovered.

Co- lour	Alt.	Mag	Names of the Stars.	Rise h m	South h m	Sets h m
♂	53	1	Aldebaran, or Bull's Eye	1 a 34	o a 48	o b c
h 2	29	1	Left foot of Orion	4 31	1 31	1 34
2 h	36	2	Middle * in Orion's Belt	4 13	1 51	o 35
♂ 8	45	1	Right Shoulder of Orion	3 23	2 8	o 8
♀ 8	21	1	Syrinx, the great Dog	6 41	3 1	o 48
♂	43	2	Procyon the little Dog	5 33	3 53	2 a 7
h 2	30	1	Heart of Hydra	8 39	5 41	2 44
h 8	51	1	Regulus, Lion's Heart	7 26	6 21	5 16
♀	54	1	The Lion's Tail, Denab	8 42	7 54	7 7
♀ 8	28	1	Virgin's Spike	12 46	9 38	6 36
♂ 2	58	1	Arcturus	10 47	10 30	10 12
♂	12	1	Antares, the Scorp. Heart	17 36	12 39	7 42
h 8	46	2	Bright * of the Vulture	17 38	16 3	9 b 27
♀ 8	6	1	Fomelhaut	11 14	19 11	10 37
♀ 2	56	2	Head of Andromeda	10 42	10 10	2 56

THE brightest of the seven stars is of the third magnitude, and hath 61 degrees of meridian altitude, and in colour participates of the γ and δ .

The fixed stars all rise, south, and set about four minutes sooner every night than they did the night before; this considered, the exact time of rising, southing, and setting for any intermediate night, not herein noted, may be very easily deduced from these tables, by inspection only.

To know the time of rising, southing, and setting of any star in this table, for any day required; it is but considering how many hours and minutes that star rises, souths or sets, either before or after the seven stars on that day, and you will have your desire; observing that in this table, a stands for *after*, and b for *before*.

A Table shewing the Bearing, Distance, Longest Day, and Difference of the Meridians of most of the principal Cities in the World, from the famous City of LONDON.

Names of Places.	The Way or Point of bearing	Dist in Miles	Longest Day		Differ. Merid.	
			h	m	h	m
<i>Alexandria in Egypt</i>	SE. by E.	2169	14	00	2	42A
<i>Amsterdam in Holland</i>	E. by N	266	16	40	0	28A
<i>Athens in Greece</i>	SE. by E.	1642	14	40	0	56A
<i>Antwerp in Brabant</i>	East fere	748	16	28	0	24A
<i>Babylon</i>	E. S. E	2724	14	45	3	56A
<i>Bethsaida</i>	SE. by E.	2369	14	6	3	20A
<i>Bermudas</i>	W. S. W.	3409	14	10	4	56A
<i>Calcutta in East-Indies</i>	SE. by E.	5214	12	10	6	8A
<i>Calais in France</i>	E. by S.	86	16	25	0	9A
<i>Constantinople</i>	E. S. E.	1547	15	15	2	24A
<i>Dublin in Ireland</i>	NW. by W	296	17	15	0	26A
<i>Dantzick</i>	E. N. E.	961	17	5	1	44A
<i>Damascus</i>	E. S. E.	2404	14	15	3	16A
<i>Edinburgh in Scotland</i>	North	328	17	40	0	0A
<i>Ephesus</i>	E. S. E.	1808	14	40	1	52A
<i>Florence</i>	S. E.	802	15	10	0	57A
<i>Frankford</i>	East fere	448	16	15	0	47A
<i>Hamburg</i>	E. N. E.	538	18	0	0	56A
<i>Jerusalem</i>	SE. by E.	2352	14	8	3	3A
<i>Lisbon in Portugal</i>	S. S. W.	985	14	45	1	0A
<i>Middleburgh in Zealand</i>	East	205	16	26	0	20A
<i>Mentz in Germany</i>	East	410	16	25	0	40A
<i>Morocco in Barbary</i>	S. S. W.	1449	14	0	0	28S
<i>Mexico</i>	W. by S.	6844	13	20	0	59A
<i>Naples</i>	SE. by E.	1051	14	50	0	16S
<i>Paris in France</i>	S. S. E.	215	15	57	0	20A
<i>Prague in Bohemia</i>	East fere	700	16	15	1	14A
<i>Quinxal</i>	E. by S.	7272	13	35	1	28A
<i>Rome</i>	SE. by E.	887	15	4	1	7A
<i>Strasbourg</i>	E. by S.	432	16	6	2	41A
<i>Toledo in Spain</i>	S. by W.	934	14	36	5	36A
<i>Troy</i>	E. S. E.	1605	15	00	2	26S
<i>Venice</i>	E. S. E.	424	15	28	1	30
<i>Seville</i>	S. by W.	950	14	40	0	52A
<i>Tork</i>	North fere	150	17	5	0	8A
<i>L O N D O N</i>			16	24	0	0A

P R O E M.

WHEN Sis'ra proud, a hostile band
 Led fierce against the promis'd land,
 And Israel's ruin fought ;
 Little he dreamt that a decree
 From heav'n had fix'd his destiny,
 While stars 'gainst Sis'ra fought.

How long, th' expecting mother cries,
 His chariots wait to bring the prize,
 And trophies he has won ;
 Maternal fondness thus exults,
 While vainly she her maids consults,
 What prize shall grace her son.

In fancy's eye she sees a throng
 Of captiv'd Hebrews move along,
 By valiant Sis'ra led :
 Fond mother, cease ; thy strains give o'er,
 Thy Sis'ra triumphs now no more,
 He's number'd with the dead.

When angels to the list'ning earth,
 In strains celestial sung the birth
 Of Heav'n's eternal King ;
 The Eastern Magi from afar,
 Led by Heav'n's messenger, a Star,
 To him their off rings bring.

Then cease thy strain, licentious wit,
 While Heav'n's decrees in holy writ
 This sacred truth unfold :
 That when descended from above,
 For lost mankind redeeming love,
 A *Star* the God foretold.

Of the ECLIPSES in the present YEAR, 1789.

IN the circumference of this revolving year there will be four Eclipses; two of each luminary, but one only will be visible to the inhabitants of Great Britain. These will happen in manner following.

The first will be an invisible eclipse of the Moon, and will happen on Saturday May the 9th, in manner following:

Beginning at 8 h. 38 min. in the morning.

Middle - 9 h. 31 min.

End - 10 h. 24 min.

Digits eclipsed $2^{\circ} 54'$ on the Moon's Northern limb.

The curious in this doctrine of Penumbrae will please to observe, that this eclipse, though invisible to us, will be visible to all the Western parts of North and South America; the whole will be seen at the Sandwich and Friendly Islands; also New Holland, the Philippine Isles, Japan, &c.

The second in order, during this year's revolution, will happen on Sunday May the 24th, at 20 min. and a half past 10 at night, when there will be a defect of the Sun, which although totally invisible to the inhabitants of this isle, yet it will be centrally eclipsed on the meridian at 10 h. 18 m. in lon. $154^{\circ} 29'$ West, and South lat. $11^{\circ} \frac{1}{2}$.

The third is a visible eclipse of the Moon, which will happen as follows:



Beginning Nov. 2, 11 h. 28 m. at night

Middle Nov. 3, 0 h. 32 m. morn.

End - 1 h. 36 m.

Digits eclipsed $3^{\circ} 40'$ on D° 's Southern limb; a type of which may be seen in the margin.

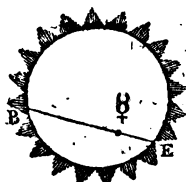
This eclipse will be visible not only to the inhabitants of Europe and Africa, but also to the Western parts of Asia, and in the Eastern parts of America; but in China and Chinese Tartary, and those parts, as the Moon sets before the eclipse is over, the end thereof to them will not be visible.

I shall not advance any astrological predictions upon this eclipse in this place, because that may more properly be handled when we take a view of the whole scheme of the

Heavens, and the positions of the celestial wanderers at the commencement of the Autumnal Quarter.

We therefore proceed to the fourth and last eclipse, which will be an invisible one of the Sun, and will happen on Tuesday, the 17th of November, at 3 h. 29 m. morn. This eclipse, although invisible to us, will be central on the meridian at 3 h. 22 m. in long. $129^{\circ} 31'$ East, and in North lat. $14^{\circ} 45'$; and of consequence will be visible to the Eastern parts of Tartary in Asia, China, and Japan.

We think proper in this place to mention a remarkable transit of the planet Mercury over the Sun's disc, on the 5th of November in the afternoon, of which take the following calculation:



Ingress or beginning	1 h. 10 min.
Elliptic conjunction	3 h. 30 m.
Middle of the transit	3 h. 37 m.
Sun sets	- - 4 h. 40 m.
Central-egress or end	6 h. 4 m.

For a further illustration of which we have annexed a type in the margin.

The industry of the Sons of Urania, (never enough to be commended) has now so far improved their knowledge in the celestial science, as to be capable to detect the erratics in every part of their orbit, and shew their situation in the vast expanse upon the narrow scantling of a slip of paper.

Musis, inimica turba.—Secum habitant sapientes.

We come next to treat of a Comet, which is expected to appear at the latter end of the year 1788, or the beginning of the year 1789, and about which we were silent the last year, expecting this might make its appearance in the world at the time, if not before this surprising phenomenon was visible in the Heavens.

These rangers in the wide circuit of expanse, making their appearance so rarely to the inhabitants of our terrestrial orb, of consequence seldom become the subject of a work of this kind, whose chief business is to give an annual register of the planetary motions.

The author of this performance, therefore, thinks it not amiss, if, for the amusement and instruction of multitudes of his plain and honest country readers, he indulges himself with a page extraordinary upon a subject the terror and admiration of ages past.

Comets (vulgarly called *Blazing Stars*) were for ages past looked upon as forerunners of Heaven's dire vengeance upon the inhabitants of this earth. For this purpose they were supposed to be lighted up in the Heavens, and, having blazed forth the tremendous tidings, were again extinguished. Our modern astronomers have, by diligent study and strict observation, however, found out, that they are planets created with the other parts of the solar system, which run in very eccentric orbits, and whose periodical revolutions far exceed that of Saturn. And although the number of them, or their exact periods of return, for want of sufficient data, cannot be yet ascertained, yet there are sufficient reasons to convince us of the truth of their assertion. As I would produce nothing upon this head but from the best and greatest authority, I beg leave to inform you, that the following remarks are quoted from an advertisement of the expected return of the comet of 1532, 1661, and again in the year 1788, or 1789, as it was read by the learned and Rev. Dr. Maskelyne before the Royal Society.

This worthy and truly ingenious gentleman, who is now Astronomer Royal, and a Fellow of the Royal Society, has the following observation, viz.

“The comet of 1531, 1607, and 1682, having returned in the year 1759, according to Dr. Halley's prediction in his *Synopsis Astronomiæ Comitiæ*, first published in the Philosophical Transactions in 1705, and republished with his Astronomical Tables in 1749, there is no reason to doubt that all the other comets will return after their proper periods, according to the remarks of the same author.”

He further observes, that astronomers have generally acquiesced in the conjecture, that the comets of 1532 and 1661 were one and the same, and to expect its return to its perihelium accordingly in 1789.

After a learned and philosophical discourse, worthy the genius and scientific knowledge of so great and learned a man (but to which for want of room we must refer the reader), he observes we may still expect it to return to its perihelium in the latter end of the year 1788, or the beginning of 1789, and certainly some time before the 27th of April, 1789.

I cannot quit this curious phenomenon, without quoting from so great an authority the following observation, viz. That it will approach us from the Southern parts of its

orbit, and therefore will appear with considerable South latitude, and South declination; so that persons residing nearer the equator than we do, or in South America, will have an opportunity of discovering it before us. It is to be wished that it may be first seen by some astronomer in such a situation, and furnished with proper instruments for settling its place in the heavens, the earliest good observations being most valuable for determining its elliptic orbit, and proving its identity with the comets of 1532 and 1661. The Cape of Good Hope would be an excellent situation for this purpose.

Thus much for the astronomical part, in which I have quoted the best authorities; and the highest praises can never repay the laborious searches of these scientific worthies. Proceed we now to consider what may be said upon astrological judgments, on the effects of comets. Admitting there are a set of people of a particular melancholy cast of mind, who have a prodigy for every calamity, and a calamity on earth for every prodigy in heaven; yet this will neither prove nor disprove the truth or the falsehood of a comet's influence in the astrological line. We acknowledge that with the ancients comets were looked upon as certain presages of wars, commotions, earthquakes, inundations, plagues among men, murrain among beasts, fire and famine, and certain impending ruin of some kind or other. Let us now examine what says the historical page? Why, it must be acknowledged, that it gives accounts of accidents happening similar to the above mentioned; and Solomon acknowledges what has been will be, and there is no new thing under the Sun. We will next allow with the modern astronomers, that the comets run in very elliptical orbits, and have their appointed periods. Yet this question remains, viz. Have not all things in this world of vicissitudes their rotation? and what has happened under like circumstances for ages past, may we not rationally expect again?

In my last discourse upon the veracity of certain dreams, for which I produced such evidence as is uncontrovertible to any one who is not impious enough to deny the truth of Holy Writ, I beg leave here, by way of appendix, to illustrate the whole with certain passages from the New Testament, which take as follow.

When the Virgin Mary was espoused to Joseph, before they came together, she was found with child, of the Holy Ghost.

Ghost. But Joseph, when he was minded to put her away privily, Behold an angel of the Lord appeared to him in a dream, saying, "Fear not, Joseph, to take unto thee Mary thy wife; for that which is conceived in her is of the Holy Ghost."—Matth. i. ver. 18, 19, 20. Again, when the wise men from the East, led by a star, came to pay their offerings to the infant God, and when Herod's subtlety had imposed upon their credulity, we find, being warned by God in a dream, that they should not return to Herod, they departed into their own country, and went another way.—See Matt. i. ver. 12. The Divine Providence ordained the grand mystery of our redemption; so, when Herod saw he was disappointed, he slew all the poor innocents in Bethlehem under two years old, and unknowingly by that means fulfilled the prophecy:—"In Rama was a voice heard, Rachael weeping for her children," &c. &c. But how was Joseph warned of this? The answer is—By a dream. "Arise (said the angel of the Lord), and take the young child and its mother, and flee into Egypt, and be there until I bring thee word: for Herod will seek the young child to destroy him."—Ver. 13. Again, when Herod was dead, how was the news conveyed to Joseph? By a dream, "Arise (said the angel), and take the young child and his mother, and go into the land of Israel; for they are dead who sought the young child's life."—Ver. 19, 20. Lastly, when the Saviour of mankind stood before the judgment-seat of Pilate, Pilate's wife sent unto him, saying, "Have thou nothing at all to do with this just man, for I have suffered many things this day in a dream because of him."—Ch. xxvii. ver. 19.

I have now concluded all that I designed to say upon the intelligence the Almighty has been pleased to give in this manner. I will not every idle roving of the fancy in sleep to be interpreted as a foreboding of somewhat to happen; but that dreams have been certain predictions, no greater authority can a Christian reader require than that which I have already produced. As to the truth of dreams which have been three times repeated, I will not answer: this I know, that an ancestor of our family, who lived in Yorkshire, dreamt three times in one night that there was a salmon in a pit he well knew, which the floods had left full of water: He accordingly arose, took a lanthorn, and tying a small cord around him, with a dart at the other end, went to the pit; and the next morning he and the fish

were both found dead in the water. His name was Toler, and the place is called Toler's Pit to this day.

If it shall please the Divine Being to spare my life, in my next performance I design to shew how mankind have been forewarned and admonished by apparitions, in which avoiding every idle tale; for what I write I shall produce the best authority. But my narrow limits and ancient custom require now that I hasten to the seasons; upon which please to take the following reflections.

Of the WINTER QUARTER.

FOR this Quarter we shall have very little to observe, as our conclusion of our last Ephemeris may very well answer for the whole of this. What more particularly requires your notice, among the celestial intelligences, is as follows: The Quarter begins on the Sun's verging upon Capricorn, being the 21st day of December, and the old year concludes, or the new one commences, with an ominous quartile aspect of ♂ and ♀ ; while the present one is ushered in with another of no better import, and the aggregate presents a confused scene which time alone can unravel. While the world endures, nations as well as private persons will busy themselves about either gaining or securing what the world calls property. When private persons are engaged, vociferous exclamations at the Bar determine the matter: but when nations contend, fire and sword, joined to all the calamities that hell can invent for the extermination of the human race, is the *ultima ratio regum*. As old Polonius says, 'Tis true, 'tis pity; and pity 'tis, 'tis true. However, from the beginning of creation to the present hour, and from hence to the final dissolution of all things, so is the will of Heaven, there is a constant mutation in all mundane affairs; and the late transactions and alterations in the Western world afford abundant matter to prove the truth of the Latin old adage,

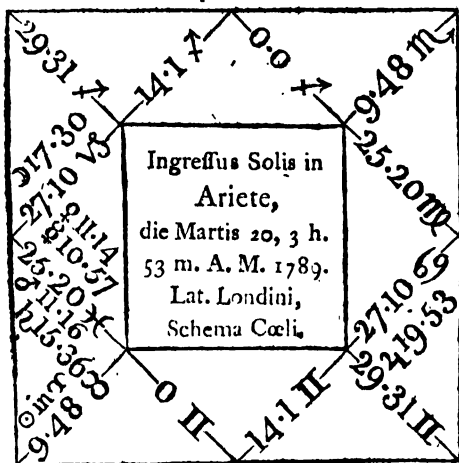
*Nunc mea, nunc hujus,
Sed postea nescio cujus.*

I know 'twas mine;—'tis your's, you now suppose;
But whose it is to be,—God only knows.

The VERNAL or SPRING QUARTER.

THIS Quarter begins March 20, and the Sun enters Aries at 3 h. 53 m. *mane*. I will give as usual the scheme

for the year, which those who understand may interpret for themselves, and those who do not must take the *ipse dixit* of a frail mortal.



We find at the commencement of this Quarter, that Sagittary is upon the medium Cœli, and $27^{\circ} 10'$ of Capricorn ascends in the East. The cœlestials are, excepting Luna, all sub-terra, and no less than four of them in the aquatic sign Pisces; Mercury is retrograde, but changing his course for direct. *In hoc signo non est sibi aut domus seu exalt, vel trip*, says the ancients. However, we find that the Quarter is ushered in with some notable aspects; Mars and Venus, the same fiery deity and the winged Mercurius; and again, the Queen of Beauty and the Messenger of Heaven have just passed a conjunction with each other; and we further find that this commencement is speedily followed by a conjunction of Saturn with Venus, and another of Saturn and Mars; these, too, are succeeded by two benign aspects, viz. a trine of Jupiter with Venus, and another of Jupiter with Mars. I suspect much negotiation, many schemes on foot; but, if I rightly judge, of the pacific kind. May He, in whose hands are all events, to dispose the hearts of the rulers of his people, of what nation or denomination soever, that peace and happiness, truth and justice, religion and virtue, may flourish among the sons of men! Proceed we now to the other Quarters.

Of the SUMMER QUARTER.

THIS Quarter commenceth the 21st day of June, at 1 h. 55 m. *mane*, when the Sun makes his first advance to Cancer; and from the various configurations herein displayed, the scene upon the theatre of the world is like to prove a busy one. There is a prophecy in Nostrodamus, *canto x. stanza 100*, favourable to England, and not yet fulfilled; but whether it will happen in our day, I dare not determine. It is in English as follows:

The great empire shall be in England,
The Pempotan for more than three hundred years,
Great armies shall pass through sea and land,
The Portuguese shall not be contented therewith.

But I now proceed to *The AUTUMNAL QUARTER*.

THIS Quarter begins on the 22d day of September, at 28 m. past 3 P. M. when the Sun, once more entering the celestial balance, measures out days and nights in equal portions. All the present page will admit of, is the result of my contemplations upon the planetary aspects to the period of this year, wherein, although there appear many favourable aspects, yet there are no less than ten inhospitable quartiles, whose ill effects will be but too severely felt. The following hieroglyphick, the veracity of which I think may be depended upon, although I cannot ascertain its date, is with its motto very applicable to the present state of things.

Nullum malum solum; vel
Uno bono sublato, mille existant.



C O N C L U S I O N.

WHEN we look into the various revolutions of rolling ages, and the mutations from time to time, not only in the different parts of this terrestrial globe, but in the manners of its inhabitants; when we reflect upon the decay of ancient empires, and the rise of others; when we examine the history of the present century, and the late revolutions in the Western World; not to mention the concurrences of the celestial agents, or the effects of planetary positions; the most incredulous in the starry predictions must acknowledge, that the grand projector of the whole, in whose hands are all events, and whose providential eye is ever over all his works, has one great end in view; and however dark and mysterious his dispensations may appear to the narrow limits of human capacity, yet has he appointed a time when the whole shall be accomplished. We find in this our age, philosophy, both natural and moral, not only shining upon us, the descendants of the worshippers of Thor and Tuesco, but dawning upon the darkest nooks of the creation; to soften their manners, remove their prejudices, and, by driving away the clouds of ignorance from their benighted senses, enlighten their understandings against that glorious morn when the Sun of Righteousness shall arise upon them with healing under his wings. That all shall come to the knowledge of God, and of his Son Jesus Christ our Lord, is the language of Holy Writ, and the sure word of prophecy; of which, though heaven and earth shall pass away, yet not one word or tittle shall pass away, until the whole be fulfilled; then cometh the end, when the Son shall deliver all to the Father, that God may be all in all. Then shall the mysteries of Providence be cleared up from Adam the father of us all, to Noah the founder of the second world, from Noah to Moses, from Moses to Christ, and from Christ to the conclusion of all things. In full assurance of these things, may we, in this our day, to mind the things which belong to our everlasting welfare, that we may lay us down in peace, and rise with hope immortal, and live in joys eternal! Amen.

F I N I S.

Merlinus Liberatus.

BEING AN

ALMANACK

For the Year of our Redemption,

1789,

Being the First after *Bissexile*, or *Leap Year* ;
And from the Creation of the World, according
to the best History, 5736,

And the 100th of our Deliverance by *K. William*,
From Popery and Arbitrary Government ;

But the 94th from the

Horrid, Popish, High-Church, Jacobite Plot.

Wherein are contained all Things fitting and useful for such a Work; as
an Ephemeris of the daily Motions of the Planets, with their various
Configurations, Aspects, Conjunctions, Lunations, Eclipses; Astrono-
mical, Astrological, Meteorological Observations, the Rising and Setting
of the Sun, Moon, Planets, and fixed Stars, illustrated with Tables of
the Tides, Terms, and daily Equation of Clocks, Length and Break
Increase and Decrease of Days, Semidiurnal and Seminocturnal Arches
for several Latitudes, a Chronology, Related to the Divisions of the
Heavens, with Judgments of the Eclipses and Seasons, handled ac-
cording to the Rules of the Ptolomean Astrology, with many other
Things relating to the Truth of Astrology. And will equally serv-
also for either *Parker's* or *Saunders's* Almanack, as it contains mo-
of the useful Parts of those other two Works, and *White's* Ephe-
meris contains the rest.

Calculated for the Meridian of LONDON.

By JOHN PARTRIDGE.

— *Etiam Mortuus loquitur.* —

L O N D O N.

Printed for the Company of STATIONERS;

And Sold by *Robert Horsfield*, at their Hall, in *Ludgate Street*.

[Price stitched Nine Pence.]

A Table of the Common Notes, and Moveable Feasts, for the Year of our Lord 1789.

Golden Number	4	Easter Sunday	April 12
Epact	3	Rogation Sunday	May 17
Dominical Letter	D	Ascension Day	May 21
Cycle of the Sun	6	Whit Sunday	May 31
Roman Indiction	7	Trinity Sunday	June 7
Number of Direction	22	Sundays after Trinity	24
Sundays after Epiphany	4	Advent Sunday	Nov. 29
Septuagesima Sund.	Feb. 8	Year of the Julian Per.	6494
Ash Wednesday, Feb.	25	Year of the Dionysian	113

A Table of the 12 Signs, 7 Planets, and Aspects.

♈ Aries, <i>Head and Face.</i>	♄ Saturn.
♉ Taurus, <i>Neck and Throat.</i>	♃ Jupiter.
♊ Gemini, <i>Arms and Shoulders.</i>	♂ Mars.
♋ Cancer, <i>Breast and Stomach.</i>	☉ Sol, or the Sun.
♌ Leo, <i>Heart and Back.</i>	♀ Venus.
♍ Virgo, <i>Bowels and Belly.</i>	☿ Mercury.
♎ Libra, <i>Reins and Loins.</i>	☾ Luna, the Moon.
♏ Scorpio, <i>Secret Members.</i>	♁ Dragon's Head.
♐ Sagittarius, <i>Hips and Thighs.</i>	♂ Dragon's Tail.
♑ Capricorn, <i>Knees and Hams.</i>	☿ Part of Fortune.
♒ Aquarius, <i>Legs and Ancles.</i>	☿ Tellus, or Earth.
♓ Pisces, <i>Feet and Toes.</i>	

♌ Conjunction, *In one Sign and Degree.*

* Sextile, *is 2 Signs, or 60 Degrees.*

□ Square or Quartile, *is 3 Signs, or 90 Degrees.*

△ Trine, *is 4 Signs, or 120 Degrees.*

♌ Opposition, *is 6 Signs, or 180 Degrees.*

♈ ♌ ♀ Hot and dry, Fiery

♈ ♌ ♀ Hot and moist, Airy

♈ ♌ ♀ ♀ Diur. Mascul.

♈ ♌ ♀ ♀ Cardinal & Movea.

♈ ♌ ♀ ♀ Common Signs

♈ ♌ ♀ are Barren

♈ ♌ ♀ Cold & dry, Earthy

♈ ♌ ♀ Cold & moist, Watery

♈ ♌ ♀ ♀ Noct. Femin.

♈ ♌ ♀ Fixed Signs

♈ ♌ ♀ Fruitful Signs

♈ ♌ ♀ Bicorporeal

<i>Kings Names. Reigns began.</i>	<i>The direct Lineal Descent of His Majesty K. George III.</i>
William Conq Oct. 14, 1066	Henry II. K. of England, had
William Rufus Sept. 9, 1087	Maud mar. Hen. the Lion, D.
Henry 1. - Aug. 2, 1100	of Bavaria and Saxony, had
Stephen - - Dec. 1, 1135	Wil. of Lun. mar. Helena, D.
Henry 2. Rosam. Oct. 25, 1154	of Worldemer, K. of Den. had
Richard 1. - July 6, 1189	Otho D. of Brunf. and Lunen.
John - - - April 6, 1199	_____ had _____
Henry 3. - Oct. 19, 1216	Albert the Great D. of Brunf.
Edward 1. - Nov. 16, 1272	_____ had _____
Edward 2. - July 7, 1307	Albert the Fat D. of Brunf.
Edward 3. - Jan. 25, 1327	_____ had _____
Ric. 2. W. Tyler June 21, 1377	Magnus D. of Brunswick
Henry 4. - - Sept. 29, 1399	_____ had _____
Henry 5. - Mar. 20, 1413	Mag. Torquat. D. of Brun. & Lun.
Henry 6. - - Aug. 31, 1422	_____ had _____
Ed. 4. J. Shore Mar. 4, 1461	Bernard D. of Brun. & Lun.
Edward 5. - April 9, 1483	_____ had _____
Richard 3. - June 22, 1483	Frederick Duke of Lunenb.
Henry 7. - - Aug. 22, 1485	_____ had _____
Henry 8. - Apr. 22, 1509	Otho the Great D. of Lunenb.
Edward 6. - Jan. 28, 1547	_____ had _____
Mary 1. - - July 6, 1553	Henry Duke of Lunen. had
Elizabeth - Nov. 17, 1558	Ernest Duke of Lunenb. had
James 1. - - Mar. 24, 1603	Wil. D. of Lunen. Zel. had
Charles 1. - Mar. 27, 1625	Elizabeth, mar. Fred. K. of
Charles 2. - Jan. 30, 1649	Bohemia, had Geo. P. of Cal-
James 2. - - Feb. 6, 1685	lenbar and D. of Hanover,
Will. 3. & M. 2. Feb. 13, 1689	had Sophia, mar. Ernest Au-
Anne - - - Mar. 8, 1702	gustus Bishop of Osnaburgh,
George 1. - Aug. 1, 1714	and Elector of Brunswick
George 2. - June 11, 1727	Lunenburgh, had George, by
George 3. - Oct. 25, 1760	the Grace of God, King of
	Great-Britain, &c. who had
	George II. who had Fred. Pr.
	of Wales, who had George III.
	his present Majesty, whom
	God preserve.

A Table of the Moon's Age for every Day throughout the Year 1789, whereby, with the Help of the next General Tide Table, the Time of High Water at all the Places mentioned above it, are shewn by Inspection.

An Explanation of this, and the following Table:

First find the Month on the Head of the Table, and the Day of the Moon's Age, with the left Hand, and in the Angle of meeting you have the Day of the Moon's Age, which enter the following Table, and find your said Number in the left Hand Column, and over against it in the other Column is the Time of High Water at all the Places above mentioned, by Inspection.—*Example, Jan. 2d* I find the Moon to be 7 Days old, and over against 7 in the 1st Column I find 8 h. 36 m. in the 2^d Column 7 h. 6 m. in the 3^d; which are the Times of High Water at all those Places mentioned above in the 2^d and 3^d Columns. *Et sic de ceteris.*

Month.	Day.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
January.	1	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
February.	1	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
March.	1	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
April.	1	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
May.	1	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30										
June.	1	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30											
July.	1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30												
August.	1	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30													
September.	1	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30														
October.	1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30															
November.	1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																
December.	1	17	18	19	20	21	22	23	24	25	26	27	28	29	30																	

TIDE TABLE.

A general Tide-Table, shewing the Time of High Water at all the Places herein mentioned, viz.

Enter this Col. with the Moon's Age, and over against it you have the Time of High Water at the Places following.		Lond. Tinn. Harl. Amster. Dort, Whitby, Galatia, Gase. West of Irel. Brittain at Groin, Rotterd. and Robin H. Bay.		Down, Graves. Ramk. Guernj. Ramn. Tbanet. Scilly half Tide, Senny H. Zenn at Blacken N. Cape, bet. Cal. and Dev.		Plym. Ramf Sev. Humb. Foy, Torb. Newc. Falm. Dartm. Lizard, St. Maloet, at the Spurn, betw. Scilly and the Lix.		Hull, Lynn, Weym Foid. Answ. St. Dav. Holmes of Brisfol, Land, St. Paul's Salcom, without Ushant, Waterf. half Tide		Boson, Brisfol, Foulm Startp. Lanion. Albor. Weym. Key, Lime, before St. Nicholas, Sedmouth in the Channel, Foy.		Dover, Harw. Bullein Farm Road, Calice Road, St. John de Luca, S Forel, St. Helens, Coast of Norm. and Picardy.		Paris. Quimb. Southa. Leith. Isle of Wight, Dunk. Kentish Knock, Beachy, Canado, C. of Fland. Spiers. Dover Pier.		Portl. Peter-port, Hague, Dubl. Harf. Lambay, Magnus, Sound, Comb without the Casquets, Matnejs, Milford, Texel	
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m
1	16	3	48	2	18	6	3	6	48	7	33	11	18	12	48	9	
2	47	4	36	3	6	6	51	7	36	8	21	12	6	1	36	9	5
3	18	5	24	3	54	7	39	8	24	9	9	12	54	2	24	10	3
4	49	6	12	4	42	8	27	9	12	9	57	1	42	3	12	11	2
5	20	7	0	5	30	9	15	10	0	10	45	2	30	4	0	12	1
6	21	7	48	6	18	10	3	10	48	11	33	3	18	4	48	1	
7	22	8	36	7	6	10	51	11	36	12	21	4	6	5	36	1	5
8	23	9	24	7	54	11	39	12	24	1	9	4	54	6	24	2	3
9	24	10	12	8	42	12	27	1	12	1	57	5	42	7	12	3	2
10	25	11	0	9	30	1	15	2	0	2	45	6	30	8	0	4	1
11	26	11	48	10	18	2	3	2	48	3	33	7	18	8	48	5	
12	27	12	36	11	6	2	51	3	36	4	21	8	6	9	36	5	5
13	28	1	24	11	54	3	39	4	24	5	9	8	54	10	24	6	3
14	29	2	12	12	42	4	27	5	12	5	57	9	42	11	12	7	2
15	30	3	0	1	30	5	15	6	0	6	45	10	30	12	0	8	1

ROYAL FAMILY, &c.

BIRTH-DAYS of the ROYAL FAMILY.

KING George III. June 4, 1738	Prince Aug. Fred. Jan. 27, 1773
Prince of Wales, Aug. 12, 1762	Prince Adolph. Fred. Feb. 24, 1774
Prince Frederick, Aug. 16, 1765	Princess Mary, April 25, - 1776
Prince Wm. Henry, Aug. 21, 1765	Princess Sophia, Nov. 3, - 1777
Prs. Cha. Aug. Mat. Sept. 29, 1766	Princess Amelia, Aug. 7, - 1783
Prince Edward, Nov. 2, - 1767	Queen Charlotte, May 19, 1744
Prs. Augusta Sophia, Nov. 3, 1768	Prs. Augusta of Brun. Aug. 11, 1737
Prs. Elizabeth, May 22, - 1770	Duke of Gloucester, Nov. 25, 1743
Prince Ernest Augustus, June 5, 1771	Duke of Cumberland, Nov. 7, 1745

SOVEREIGNS of EUROPE, their Accession, &c.

Kingdoms, &c.	To whom subject.	When born.	Began to reign.
England, &c.	George III.	June 4, 1738	Oct. 25, 1760
France	Lewis XVI.	Aug. 23, 1754	May 10, 1774
Russia	Catharine II.	May 2, 1729	July 9, 1762
Spain	Charles III.	Jan. 20, 1716	Aug. 10, 1759
Portugal	Mary	Dec. 7, 1734	Feb. 24, 1777
Prussia	Frederic IV.	Sept. 25, 1744	Aug. 17, 1786
Denmark & Norway	Christian VII.	Jan. 29, 1749	Jan. 14, 1766
Sweden	Gustavus III.	Jan. 24, 1746	Feb. 19, 1771
Germany	Joseph	Mar. 13, 1741	Aug. 18, 1765
Poland	Stanislaus III.	Jan. 17, 1732	Nov. 25, 1764
Holland	William V.	March 8, 1748	Oct. 11, 1751
Papedom	Pius VI.	Dec. 27, 1717	Feb. 18, 1775
Sardinia	Victor	June 26, 1726	Mar. 20, 1773
Ottoman Empire	Achmet IV.	Nov. 5, 1719	Jan. 21, 1774

The FULL WEIGHT of the COINS, with the LEAST WEIGHT allowed to pass of the Gold Coin,

Wt. allowed.		Full Wt.		SILVER.		Full Wt.	
G.O.L.D.	dwt. gr.	dwt. gr.			dwt. gr.		
Guinea	5 8	5 9 ³⁰ ₈₀		A Crown,	- - -	19 8 ¹⁶ ₃₁	
Half Guinea,	2 16	2 16 ⁶³ ₈₀		Half Crown,	- - -	9 16 ¹⁷ ₃₁	
Quarter Guin.	1 8	1 8 ¹² ₈₀		Shilling,	- - -	20 ²⁸ ₃₁	
				Six Pence,	- - -	1 22 ¹⁴ ₃₁	

According to the above proportions it appears, that the value of a *lb.* of silver is 62s. or 31. 2s. and of a *lb.* of gold is 44½ guineas, or 46l. 14s. 6d. Also that the *oz.* of silver is 5s. 2d. and the *oz.* of gold 3l. 17s. 10½d. So that the value of the standard gold is 15 times that of the silver, and 14th more.

A TABLE of TERMS and RETURNS for 1789.

Hilary Term begins January 23, ends February 12.

Returns or Effoign Days.

	Exc.	Ret.	App	W.D.
In eight Days of St. Hilary, - - - January 20	21	22	23	Friday.
In fifteen Days of St. Hilary, - - - - - 27	28	29	30	Friday.
On the Morrow of the Parif. of bl. V. M. Feb 3	4	5	6	Friday.
In eight Days of the Parif. of bl. V. Mary, - 9	10	11	12	Thursf.

Easter Term begins April 29, ends May 25.

In 15 Days of Easter, - - - - - April 26	27	28	29	Wednesf.
From the Day of Easter in 3 Weeks, - May 3	4	5	6	Wednesf.
From the Day of Easter in 1 Month, - - 10	11	12	13	Wednesf.
From the Day of Easter in 5 Weeks, - - 17	18	19	20	Wednesf.
On the Morrow of the Ascension, - - - 22	23	24	25	Monday

Trinity Term begins June 12, ends July 1.

On the Morrow of the holy Trinity, June 8	9	10	11	Friday.
In eight Days of the holy Trinity, - - - 14	15	16	17	Wednesf.
In fifteen Days of the holy Trinity - - - 21	22	23	24	Wednesf.
From the Day of the holy Trinity in 3 Weeks, 28	29	30	July 1	Wednesf.

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the Morrow of All Souls, - - - - - Nov. 3	4	5	6	Friday.
On the Morrow of St. Martin, - - - - - 12	13	14	16	Monday
In eight Days of St. Martin, - - - - - 18	19	20	21	Saturd.
In fifteen Days of St. Martin, - - - - - 25	26	27	28	Saturd.

N. B. No Sittings in Westminster-Hall on the 2d of February, Ascension Day, and Midsummer Day.

The Exchequer opens Eight Days before any Term begins, except Trinity, before which it opens but Four Days.

Also, That the first and last Days of every Term, are the first and last Days of Appearance.

OXFORD and CAMBRIDGE TERMS.

OXFORD TERMS.

Lent Term - - begins January 14, - - ends April 4.
 Easter Term - begins April 22, - - ends May 28.
 Trinity Term - begins June 10, - - ends July 18.
 Michaelmas Term, begins October 10 - - ends Dec. 17.

The Act is July 13.

CAMBRIDGE TERMS.

Lent Term - - begins January 13, - - ends April 3.
 Easter Term - begins April 22, - - ends July 10.
 Michaelmas Term begins October 10, - - ends Dec. 16.

The Commencement will be July 7.

8 January hath XXXI Days.

Big with the Treasures of the North;
Behold the coming Clouds bring forth
And Show'rs of soft and fleshy rain;
Fall, to new clothe the Earth again.
Sol hides his Face, whilst Heaven howls,
And o'er the Heath the Tempest howls.

M	D	h	m	s
7	27	6		
6	26	6		
11	8	25	5	
16	8	25	5	
21	9	24	5	
26	9	23	5	

W	D	Remark.	Days	☉	☿	♂	♀	Aspects and Weather.
1	T	Circumcision	11	38	6	31	11	5 29 <i>Dark weather</i>
2	F	Sun rises 8h. 4m.	12	39	18	25	11	7 29 <i>☐ h ♀</i>
3	S		13	40	0	25	12	8 2 <i>and wet at the</i>
4	D	2 S. aft. Christ.	14	42	12	37	13	9 3 <i>beginning.</i>
5	M	Old Christ. day	15	43	25	5	14	10 5 <i>Turns to sharp</i>
6	F	Epiphany Twelfth-D.	16	44	7	53	14	12 6 <i>* h ♀</i>
7	W		17	45	21	6	15	13 8 <i>weather.</i>
8	T	Lucian	18	46	4	11	16	14 9 <i>Rough winds,</i>
9	F		19	48	18	55	17	15 11 <i>with flying</i>
10	S	Sun set 4h. 3m.	20	49	3	30	17	16 13 <i>clouds for some</i>
11	D	1 S. after Epiph.	21	50	18	26	18	18 14 <i>time.</i>
12	M	Plough Monday	22	51	3	36	19	19 16 <i>Old N. Yrs. D</i>
13	T	Hil. Camb. T. b.	23	52	18	48	20	20 17 <i>Then more mo-</i>
14	W	Oxf. T. beg.	24	53	3	53	21	21 19 <i>8 ☉ ♀</i>
15	T		25	54	18	41	21	23 21 <i>♂ ♂ ♀</i>
16	F	Day br. 5. 49.	26	55	3	2	22	24 22 <i>derate.</i>
17	S	Old Twelfth d.	27	56	17	7	23	25 24 <i>8 ♀ ♀</i>
18	D	2 S. after Epiph.	28	57	om	41	24	26 25 <i>Q. Ch. b. d. k.</i>
19	M		29	58	13	51	24	28 27 <i>8 ♀ ♂</i>
20	T	Fabian	30	59	26	41	25	29 29 <i>But towards</i>
21	W	Agnes	31	0	9	14	26	30 30 <i>the end dark</i>
22	T	Vincent	1	2	21	33	27	1 2 <i>and unsettled,</i>
23	F	Hil. Term beg.	2	3	3	44	28	2 4 <i>♂ ☉ ♀</i>
24	S		3	4	15	47	28	4 6 <i></i>
25	D	3 S. after Epiph.	4	5	27	45	29	5 7 <i>Conv. St. Paul</i>
26	M	Sun rises 7h. 36m.	5	6	9	39	30	6 9 <i></i>
27	T	Pr. Aug. Fr. b.	6	6	21	32	30	7 11 <i>and so</i>
28	W		7	7	3	24	1	9 13 <i>* h ♀</i>
29	F	Sun sets 4h. 39m.	8	8	15	16	2	10 14 <i></i>
30	S	K. Char. I. mart.	9	9	27	12	3	11 16 <i>concludes.</i>
31	T		10	10	9	13	4	12 18 <i></i>

Partridge. January, 1789. 9

M	Jupiter	Venus		
D.	South	South		
1	13	22	25	First Quarter 4th Day at 4 Afternoon.
6	12	37	29	Full Moon 1st Day at 6 Afternoon.
11	12	13	33	Last Quarter 18th Day at 9 Morning.
16	11	49	38	New Moon 26th Day at 6 Morning.
21	11	24	43	1st Day 1/2 South 3 46, ♂ 23 53, ♀ 23 4.
26	11	01	49	16th D. 1/2 South 2 40, ♂ 23 38, ♀ 23 44.

M	Lunar Aspects						Clock	Moon Drises		Observations
D	☉	☿	♂	♀	♂	♀	fast	South	& sets	
1	*	♂		*	□		4 23	3a40	9a36	The Square of Sa-
2		1	Δ				4 51	4 22	10 41	
3						□	5 19	5 3	11 46	it betokens no good
D	□			□	Δ		5 46	5 46		morn to those who are un-
5			□				6 13	6 32	0 54	der that domination,
6	*		Δ		Δ		6 39	7 21	2 4	yet it affects not us.
7	Δ	*					7 4	8 14	3 14	In short, I see no-
8	□			8			7 30	9 11	4 25	thing but a great
9							7 54	10 10	5 30	buffle in private ca-
10	Δ						8 18	11 13	6 26	binets, which time
D	8	♂	8		8		8 42	morn	Drise	itself must deter-
12	6	11					9 4	0 13	5a42	mine. I must say
13				Δ			9 27	1 11	7 8	this, that as Mr.
14	8						9 48	2 7	8 31	Partridge, the first
15	Δ	*	Δ	□	Δ		10 9	3 0	9 53	author of this loyal
16							10 29	3 52	11 13	Diary, was a great
17		□	□	*	□		10 48	4 42	morn	stickler for the Pro-
D	□						11 7	5 32	0 30	testant religion, so
19	Δ	Δ					11 25	6 23	1 45	am I; and if there
20			*	*			11 43	7 14	2 55	be a more hearty well
21	*	□					11 59	8 5	3 58	wisher to the present
22				♂			12 15	8 56	4 52	royal family, may I
23	*			22			12 30	9 46	5 38	be hanged, and he
24		8					12 44	10 35	6 17	succeed in my stead.
D	♂		♂	♂			12 58	11 22	6 48	In the affairs of
26	18		3	15			13 10	0a 6	D sets	this month England
27							13 22	0 48	6a14	appears to be con-
28	♂		*				13 33	1 30	7 17	cerned, and there is
29	6	Δ					13 43	2 11	8 21	an ugly aspect be-
30			*				13 53	2 53	9 25	tween ♂ and ♀,
31	*	□		*			14 1	3 35	10 32	which may affect us.

10 February hath XXVIII Days.

M	h	21	2
D	M	25	1
1	10	23	4
6	11	22	4
11	11	21	4
16	12	21	3
21	12	21	3
26	13	20	3

The Mountain Tops behold around;
 Appear with Furs of Ermine crown'd;
 And lo, descending by degrees,
 White mantling hides the naked Trees,
 While chilling Cold diffused round,
 Turn lympid Streams to solid Ground.

M	W	Sundays and	☉	☽	☿	♂	♀	♂	♀	Aspects and	
D	D	Remark. Days.	°	°	°	°	°	°	°	Weather.	
1	D	4 S. aft. Epiph.	13	11	21	☿	24	5	14	20	Wind and rain
2	M	Candlemas Day	14	14	3	♂	47	5	15	21	Purification
3	T	Blac	15	13	16	29	6	16	23		at the begin-
4	W		16	13	29	33	7	17	25		ning.
5	T	Agatha	17	14	13	11	3	8	18	27	
6	F		18	15	27	2	9	20	29		
7	S	Sun rises 7. 15.	19	16	11	☿	30	9	21	☿	☿ ☿ ☿
8	D	Septuages. Sun.	20	16	26	24	10	22	2		Weather vari-
9	M	Day breaks 5 19	21	17	11	♂	38	11	23	4	able, not unlike
10	T		22	17	27	0	12	25	6		the month
11	W		23	18	12	☿	19	12	26	7	preceding.
12	T	Hil. Term ends	24	19	27	25	13	27	9		
13	F	Old Candlemas	25	19	12	♂	6	14	28	11	♂ ☿ ☿
14	S	Valentine	26	20	26	20	15	30	12		
15	D	Sexages. Sund.	27	20	10	☿	3	16	☿	14	Some
16	M		28	21	23	17	16	2	15		downfal may
17	T	Sun sets 5. 3.	29	21	6	♂	7	17	3	17	be expected
18	W		☿	22	18	36	18	5	18		about this
19	T	Twil. ends 6. 59	1	22	0	☿	50	19	6	19	time.
20	F		2	22	12	53	20	7	20		☿ ☿ ☿
21	S	Sun rises 6. 49	3	23	24	49	20	8	21		
22	D	Quinq. Shro. S.	4	23	6	☿	41	21	10	22	
23	M		5	23	18	32	22	11	23		Dark unsettled
24	T	Sh. Tu. St. Mat.	6	24	0	☿	24	23	12	24	Pr. A. Fred. ☿
25	W	Ash-Wednesday	7	24	12	18	23	13	24		weather to the
26	T		8	24	24	15	24	14	24		end.
27	F	Day br. 4. 45.	9	24	6	☿	17	25	16	24	
28	S	Sun sets 5. 24.	10	24	18	25	26	17	R		

M	Jupiter	Venus	Partridge. February, 1789. 11			
D	South	South				
1	10	33	21	57	First Quarter 3d Day at 9 Morning.	
6	10	10	22	4	Full Moon 10th Day at 4 Morning.	
11	9	48	22	11	Last Quarter 16th Day at 10 Night.	
16	9	27	22	18	New Moon 25th Day at 1 Morning.	
21	9	7	22	23	1st Day $\frac{1}{2}$ South 1 46, δ 23 25, η 0 28.	
26	8	47	22	29	16th D. $\frac{1}{2}$ South 0 53, δ 23 14, η 1 4.	

M	Lunar Aspects.						Clock	Moon	D rise	Observations.
D	\odot	$\frac{1}{2}$	$\frac{1}{4}$	δ	η	γ	-fast.	South	& sets	
D							14 9	4 19	11 41	Jupiter, who late-
2	*			\square			14 16	5 6	6	morn ly was in opposition
3	\square	*			Δ	\square	14 21	5 56	0 49	to Mars, has seem-
4				Δ			14 27	6 49	1 56	ingly laid aside his
5	Δ	\square					14 31	7 46	3 4	resentment, or di-
6					Δ		14 34	8 45	4 4	verted his wrath in-
7		Δ	δ		8		14 37	9 46	4 55	to another channel.
D		16					14 39	10 45	5 39	If we have among
9	8			8			14 40	11 43	6 14	us a sort of subtle
10	16	8			8		14 40	morn	D rise	and no less than wic-
11			*				14 39	0 40	7 18	ked agents, who are
12					Δ		14 38	1 34	8 43	perpetually hatch-
13			\square	Δ			14 36	2 27	10 4	ing mischief, and
14	Δ				\square		14 33	3 20	11 22	filling the hearts of
D		Δ	Δ	\square	Δ		14 30	4 13	morn	a credulous people
16	\square				*		14 25	5 6	0 38	with astonishment,
17		\square				\square	14 21	5 58	1 44	it is no more than I
18				*			14 15	6 50	2 44	expect. Some per-
19	*						14 9	7 41	3 34	son of note is about
20		*	8		*		14 28	30	4 14	this time visited ei-
21							13 54	9 18	4 49	their by death, af-
D				δ			13 46	10 3	5 16	fliction, or fore dis-
23				δ	7		13 37	10 47	5 41	grace. Expect mur-
24	δ			7			13 28	11 29	6 1	murings and possi-
25	13	δ	Δ				13 18	0 11	D sets	bly some disagree-
26		1			δ		13 8	0 53	7 18	able news about
27				*			12 57	1 35	8 25	this time.
28		\square	*				12 45	2 19	9 32	<i>Felix qui potuit rerum cognoscere cau- sas.</i>

But Sol advancing now in height,
Soon makes the Day out balance Night;
While blustering Winds are iss'd forth,
From the cold Regions of the North;
And Winter, as if loth to go,
Retires unwillingly and slow.

M	D	h	m	s
1	13	20	3	
6	14	20	3	
11	15	20	2	
16	15	20	2	
21	16	20	2	
26	16	20	2	

M	W	Sundays and	☉	☿	♂	♂	♀	♀	Aspects and			
D	D	Remark. Days.	°	'	°	'	°	'	Weather.			
1	D	1 Sund. in Lent	11	25	0	8	42	27	18	24	David.	
2	M	Chad.	12	25	13	9	27	19	24		Unsettled.	
3	T		13	25	25	5	1	28	21	23	☉ ☿	
4	W	Ember Week.	15	25	8	11	5	2	29	22	23	weather still
5	T	Sun rises 6. 26.	15	25	22	14	30	23	22			continues.
6	F		16	25	6	25	1	24	21			
7	S	Perpetua	17	25	20	15	1	26	20			Δ 24 ☿
8	D	2 Sund. in Lent	18	24	4	25	5	27	19			☉ ☿
9	M	Sun sets 5. 42.	19	24	19	53	3	28	18			Δ ☉ 24
10	T	Day br. 4. 24.	20	24	5	22	5	4	29	17		
11	W		21	24	20	19	4	2	16			High winds,
12	T	Gregory	22	23	5	24	5	2	15			☉ ☿ ♀
13	F		23	23	20	11	6	3	15			and storms in
14	S	Sun rises 6. 8.	24	23	4	22	7	4	14			many places.
15	D	3 Sund. in Lent	25	22	18	25	8	6	13			
16	M		26	22	1	48	8	7	12			Frosty.
17	T	St. Patrick	27	22	14	44	9	8	12			
18	W	Edw. K. W. S.	28	21	27	17	10	9	11			
19	T		29	21	9	33	11	10	11			☉ ☿ ♀, ☉ ☿ ♀
20	F	Day ends 8. o.	0	20	21	30	12	12	11			☉ ♀ ♀
21	S	Benedict	1	20	3	30	12	13	11			Stormy
22	D	Midlent Sund.	2	19	15	21	13	14	10			towards the
23	M		3	18	27	11	14	15	11			latter end.
24	T	Sun sets 6. 12.	4	18	9	2	15	17	11			☉ ☿ ♀
25	W	Lady-Day.	5	17	21	3	15	18	11			
26	T		6	16	3	7	16	19	11			☉ ☿ ♀, Δ 24 ♀
27	F	Day br. 3. 45.	7	16	15	20	17	20	11			Some
28	S		8	15	27	40	18	22	12			uncomfortable
29	D	5 Sund. in Lent.	9	14	10	8	19	23	12			weather.
30	M		10	13	22	5	19	24	13			
31	T	Sun rises 5. 34.	11	12	9	11	45	20	25	14		Δ 24 ☿

M	Jupiter	Venus	Partridge. March, 1789. 13	
D	South	South		
1	8 35	22 33	First Quarter 4th Day at 11 Night.	
6	8 16	22 39	Full Moon 11th Day at 2 Afternoon.	
11	7 58	22 45	Last Quarter 18th Day at 2 Afternoon.	
16	7 40	22 50	New Moon 26th Day at 7 Afternoon.	
21	7 20	22 55	1st Day h South 0 10, δ 23 4, ♀ 0 42.	
26	7 2	23 0	16th D. h South 23 18, δ 22 55, ♀ 22 59	

M	Lunar Aspects.						Clock	Moon	D rise	Observations.
D	☉	☿	♈	♉	♊	♋	fast	South	& sets	
D							12 33	3a 5	10a 39	No less than 12
2	*	*	*		□	*	12 20	3 54	11 48	aspects appear this
3				□			12 7	4 45	morn	month, and all of a
4	□	□					11 54	5 39	0 54	benign nature, and
5				Δ	Δ	□	11 40	6 35	1 53	every one of the pla-
6			♋				11 25	7 33	2 46	nets, both superior
7	Δ	Δ	23			Δ	11 10	8 31	3 33	and inferior, are in
D							10 55	9 28	4 10	play.
9				8	8		10 39	10 25	4 42	For my part, I am
10						8	10 23	11 20	5 11	not given to unravel
11	8	8	*				10 7	morn	D rise	every thing that oc-
12	2						9 50	0 15	7a 39	curs; because tho'
13			□				9 33	1 9	9 0	every aspect has a
14				Δ	Δ	Δ	9 16	2 4	10 19	meaning, yet if that
D	Δ	Δ	Δ				8 58	2 59	11 33	meaning will not
16				□	□	□	8 41	3 54	morn	enter into my head,
17		□					8 23	4 48	0 38	I shall only mislead
18	□						8 5	5 40	1 32	my honest reader.
19		*	8	*	*	*	7 47	6 31	2 16	I know there are
20	*						7 29	7 20	2 55	enow who will from
21							7 10	8 7	3 26	such a set of propi-
D							6 52	8 52	3 50	tious aspects, prog-
23							6 33	9 35	4 13	nosticate peate on
24		♋	Δ	♋	♋	♋	6 15	10 17	4 34	earth, and amity a-
25		14		11	16	3	5 56	10 59	4 53	mong nations. I
26	♋						5 38	11 41	D sets	with it may be so,
27	7		□				5 19	0a 25	7a 31	but it is not my o-
28							5 1	1 11	8 39	pinion.
D		*	*		*		4 42	1 59	9 52	When people of
30	*			*			4 24	2 50	10 54	different principles,
31					□		4 5	3 43	11 56	different politics, &

The weeping April next appears,
 And oft a sable Soat she wears:
 The clouded Morn, the sober Eye,
 The too-long frozen Earth relieves;
 And Swains rejoice, since April Show'rs
 Productive are of May's gay Flow'rs.

M	D	h	m	D
1	17	20	1	
6	18	21	1	
11	18	21	1	
16	17	22	0	
21	19	22	0	
26	20	22	0	

M	W	Sundays and	☉	☿	♂	♀	♂	♀	Aspects and		
D	D	Remark. Days	°	'	°	'	°	'	Weather.		
1	W	Day br. 3. 33.	12	11	18	11	53	21	27	15	
2	T		13	10	22	5	18	22	28	16	♂ ♀ ☿
3	F	Richard	14	9	16	2	23	29	17		C. Ter. ends
4	S	St. Ambrose	15	8	0	Ω	5	23	17		Ox. T. ends
5	D	Palm Sunday	L. day	14	27	24	1	18			Winds and
6	M	Sun sets 6. 38.	17	6	29	4	25	3	19		showers.
7	T	Day ends 8. 43.	18	5	13	11	53	26	4	21	Δ ♀ ☿
8	W		19	4	28	46	26	5	22		Seasonable
9	T	Maundy Thurs.	20	3	13	△	33	27	6	23	□ ☉ ♀
10	F	Good Friday	21	1	28	8	28	8	24		pleasant
11	S		22	0	12	11	23	29	9	25	weather for
12	D	Easter-Day	22	59	26	15	30	10	26		the season,
13	M	Easter-Monday	23	57	9	14	1	11	28		which we may
14	T	Easter-Tuesday	24	56	22	42	1	13	29		hope to continue
15	W		25	55	5	13	21	2	14		till the latter
16	T	Day br. 2. 53.	26	53	17	41	3	15	2		end, when
17	F	Sun rises 5. 1.	27	52	29	47	3	16	3		♂ ☿ ☿
18	S		28	50	11	44	4	17	5		an alteration
19	D	Low Sunday	29	49	23	37	5	19	6		Alphege
20	M		0	47	5	29	6	20	8		may be expected
21	T		1	46	17	25	6	21	9		□ ♀ ☿
22	W	Ox. & C. T. beg.	2	44	29	27	7	22	11		
23	T	St. George	3	42	11	40	8	24	12		
24	F		4	41	24	3	9	25	14		
25	S	St. Mark	5	39	6	39	10	26	16		Prs. Mar. b.
26	D	2d Sund. aft. East.	6	37	19	27	10	27	17		Perhaps some
27	M	Sun sets 7. 17.	7	36	2	29	11	29	19		downfall about
28	T		8	34	15	44	12	30	21		this time.
29	W	Easter T. begins	9	32	29	11	13	8	23		□ ♀ ☿
30	T	Day ends 9. 54.	10	30	12	51	13	2	24		

Partridge. April, 1789. 15

M	Jupiter	Venus
D	South	South
1	6 42 23	6
6	6 25 23	10
11	6 8 23	14
16	5 51 23	18
21	5 38 23	23
26	5 20 23	27

First Quarter 3d Day at 8 Morning.
 Full Moon 9th Day at 11 Night.
 Last Quarter 17th Day at 8 Morning.
 New Moon 25th Day at 10 Morning.
 1st Day $\frac{1}{2}$ South 22 27, δ 22 43, η 22 21.
 16th D. $\frac{1}{2}$ South 21 39, δ 22 30, η 22 32.

M	Lunar Aspects.						Clock	Moon	D rise	Observations.
D	\odot	\uparrow	\downarrow	δ	η	ζ	fast	South	& sets.	
1		\square		\square	\square		3 47	4 38	morn	different interests,
2							3 29	5 34	0 51	all make the greatest
3	\square	Δ	δ	Δ		Δ	3 10	6 30	1 38	thow of friendship,
4			8		Δ		2 53	7 26	2 16	there is the greatest
D	Δ						2 35	8 21	2 50	reason in the world
6							2 17	9 15	3 19	to believe that there
7		8	*	8		8	2 0	10 8	3 45	is much fallacy and
8					8		1 43	11 2	4 10	diffimulation among
9	8		\square				1 26	11 57	D rise	them, and that such
10	11						1 9	morn	7 25	connections can ne-
11		Δ	Δ				0 52	0 52	9 16	ver hold long.
D				Δ		Δ	0 36	1 47	10 26	Now if these af-
13		\square		Δ			0 21	2 43	11 28	pects are the fore-
14	Δ			\square		\square	0 25	3 38	morn	runners of human
15					\square		0 10	4 31	0 19	events, the difference
16		*	8				0 25	5 21	1 0	of the natures of the
17	\square			*		*	0 39	6 9	1 33	planets, and their
18					*		0 53	6 55	2 0	mutual visits with
D	*						1 6	7 39	2 24	each other, seem to
20							1 19	8 21	2 46	point out more nego-
21		δ	Δ				1 32	9 3	3 5	ciation than honesty,
22		9		δ			1 44	9 45	3 24	and when the time
23			\square	17		δ	1 56	10 28	3 45	arrives, I believe it
24	δ				δ	2	2 7	11 13	4 6	will appear so, espe-
25	22				2		2 17	0 21	D sets	cially as three male-
D		*	*				2 28	0 52	8 25	volent squares are
27				*			2 37	1 45	9 56	this month threat-
28		\square			*		2 47	2 40	10 53	ening the world
29					*		2 55	3 36	11 43	with their baneful
30	*	Δ	δ	\square			3 3	4 32	morn	influence.

6 May hath XXXI Days.

Now Flora, beautiful and gay,
Doth bid all hail to welcome May;
And Meads, and Gardens, trim are seen,
With Flowers deck'd and Herbage green;
The Warblers sweet exert their Voice,
And Birds, and Beasts, and Men rejoice.

M	h	u	D
D	X	u	f
1	20	23	0
6	21	24	m
11	21	24	29
16	21	25	29
21	22	26	29
26	22	27	28

W	Sundays and	o	8	D	u	f	g	g	Aspects and	
D	Remark. Days.	o	f	o	f	u	8	u	Weather.	
1 F	St. Phil. & Jam.	11	28	26	u	43	14	4	26	May appears
2 S		12	26	10	u	46	15	5	28	to be ushered
3 D	3 Sun. aft. East.	13	24	24	59	16	6	30		Invent. Cross
4 M	Day br. 1. 55.	14	23	9	m	20	16	7	8	in with fine
5 T		15	20	23	45	17	8	4		and springing
6 W	John, E.A.P.L.	16	18	8	u	10	18	10	6	showers.
7 T		17	16	22	30	19	11	8		Afterward
8 F	Sun rises 4. 24.	18	14	6	m	41	19	12	10	xxpet some
9 S		19	12	20	36	20	13	12		windy
10 D	4 Sund. aft. East.	20	10	4	f	15	21	15	14	* o h
11 M		21	8	17	33	22	16	16		weather.
12 T	Old May Day	22	6	u	h	31	22	17	18	o g g
13 W		23	3	13	11	23	18	21		* h g
14 T	Sun sets 7. 46.	24	1	25	33	24	20	23		Then fair and
15 F	Day ends 10. 57	24	59	7	m	42	25	21	25	o o g, * o u
16 S		25	57	19	41	26	22	27		* h g, o u g
17 D	Rogat. Sund.	26	54	1	h	35	26	23	29	* u g
18 M		27	52	13	29	27	24	11		promising.
19 T	Q. Charl. b.	Dunst.	25	26	28	26	4			* u g
20 W	Day br. o. 30.	29	47	7	u	32	29	27	6	
21 T	Ascension Day	o	11	45	19	50	29	28	8	Dark and
22 F	Prs. Eliz. b.	1	43	2	8	22	8	29	10	cloudy towards
23 S	Sun rises 4. 2.	2	40	15	11	1	11	12		the end,
24 D	S. after Ascen.	3	38	28	18	2	2	14		with some
25 M	East. T. ends	4	36	11	11	43	2	3	16	hail or rain
26 T	Augustin	5	33	25	23	3	4	18		
27 W	Ven. Bede	6	31	9	u	17	4	5	20	
28 T	Oxf. Term ends	7	28	23	21	4	7	22		o h g
29 F	K. Ch. II. rest	8	26	7	u	33	5	8	24	Warm.
30 S		9	23	21	48	6	9	26		o o g
31 D	Whit-Sunday	10	21	6	m	4	7	10	28	

M	Jupiter	Venus	Partridge, May, 1789.		17
D	South	South			
1	5	3	23	31	First Quarter 2d Day at 3 Afternoon.
6	4	47	23	35	Full Moon 9th Day at 9 Morning.
11	4	30	23	40	Last Quarter 17th Day at 2 Morning.
16	4	13	23	45	New Moon 24th Day at 10 Night.
21	3	58	23	50	First Quarter 31st Day at 8 Night.
26	3	42	23	56	1st Day 1/2 S. 20 48, 3 22 16, 4 23 7.

M	Lunar Aspects.						Clock	Moon	Drises	Observations.
D	☉	☿	♊	♋	♌	♍	flow	South	& sets	
1					☐	☐	3 11	5 27	0m 23	As cold waters to a thirty soul, so is good news from a far country. Prov. xiv. 25.
2	☐			Δ			3 18	6 21	0 57	
D					Δ	Δ	3 25	7 13	1 27	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
4	Δ						3 31	8 5	1 53	
5		8	*				3 36	8 57	2 17	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
6				8			3 41	9 49	2 42	
7			☐				3 46	10 43	3 7	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
8	8				8	8	3 49	11 38	3 37	
9	21	Δ	Δ				3 53	morn.	Drises	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
D							3 55	0 33	9 17	
11		☐		Δ			3 58	1 28	10 12	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
12							3 59	2 22	10 56	
13					Δ	Δ	4 0	3 14	11 35	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
14	Δ	*	8	☐			4 1	4 4	morn.	
15							4 0	4 51	0 5	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
16				*	☐	☐	4 0	5 36	0 29	
D	☐						3 58	6 19	0 51	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
18		♌					3 56	7 0	1 10	
19	*	16	Δ		*	*	3 54	7 42	1 30	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
20							3 50	8 25	1 50	
21			☐	♌			3 47	9 9	2 11	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
22				19			3 42	9 56	2 36	
23		*	*				3 38	10 45	3 4	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
D	♌				♌		3 32	11 37	Drises	
25	10				♌		3 27	0 32	8 52	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
26		☐		*		10	3 20	1 29	9 39	
27							3 13	2 26	10 23	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
28		Δ	♌	☐			3 6	3 22	10 59	
29	*		7		*		2 59	4 17	11 30	News is daily expected, If you ask from whence? I will ask you how many quarters there are. If you say four; you have then given an answer to your own question. But while the world endures, good news cannot be expected from all quarters of this terrestrial globe. And indeed in many cases, as when countries are engaged in land fights, or sea engagements; what is bad news to the loser, is good news to the winner; while those who are unconcerned in the affair, shudder while they read the story of an engagement wherein so many of our fellow creatures are made a prey for fishes or worms.
30					*		2 50	5 10	11 57	
D	☐			Δ	☐		2 42	6 1	morn.	

Now to the shade we all resort,
 And flee the Sun we late did court;
 Or while he darts his flaming beams,
 We panting bathe in cooling streams;
 And oft at even see him set
 In Thetis lap without regret.

M	h	24	h
D	h	h	m
1	23	28	28
6	23	29	28
11	23	30	27
16	23	31	27
21	23	2	27
26	23	3	27

M	W	Sundays and	☉	☿	♂	♀	♂	Mutual Aspects			
D	D	Remark. Days.	o	/	o	/	h	And Wea her			
1	M	Whit. Monday	11	18	20	17	7	12	30	Nicomede.	
2	T	Whit. Tuesday	12	15	4	26	8	13	31	Warm and	
3	W	Ember Week	13	13	18	28	9	14	3	pleasant wea-	
4	T	K. Geo. III. b.	14	10	2	21	10	15	5	ther.	
5	F	Pr. Ern. Aug. b.	15	8	16	3	10	17	6	Boniface	
6	S		16	5	29	34	11	18	8		
7	D	Trinity Sunday	17	2	12	45	12	19	9	Rain on bail.	
8	M	Sun sets 8h 13m.	18	0	25	53	13	20	11		
9	T		18	57	8	40	13	21	12		
10	W	Oxf. Ter. begins	19	54	21	13	14	23	13	☐ h ♀	
11	T	St. Barnabas	20	51	3	32	15	24	15	Cor. C. * ♂ ♀	
12	F	Trin. Ter. beg.	21	49	15	39	15	25	16		
13	S		22	46	27	39	16	26	17	☐ ☉ h	
14	D	1 S. aft. Trin.	23	43	9	33	17	28	18	Pleasant, with	
15	M	Sun rises 3 44	24	41	21	26	18	29	20	refreshing	
16	T		25	38	3	23	18	30	21	showers, and	
17	W	St. Alban	26	35	15	29	19	1	22	brisk winds;	
18	T		27	32	27	48	20	3	23	Δ h ♀	
19	F		28	30	10	8	25	21	4	23	perhaps some
20	S	Tr. Ed K. W. S.	29	27	23	22	21	5	24		
21	D	2 S. aft. Trin.	0	24	6	11	41	22	6	25	Longest day
22	M		1	21	20	24	23	7	26	* h ♂	
23	T	Sun rises 3 43	2	19	4	28	23	9	26	thunder	
24	W	Nat. J. Bapt.	3	16	18	49	24	10	27	Midsum. day	
25	T		4	13	3	21	25	11	27		
26	F	Sun sets 8 16	5	10	17	59	26	12	28		
27	S		6	7	2	34	26	14	28	The air sultry	
28	D	3 S. aft. Trin.	7	5	17	2	27	15	28		
29	M	St. Peter	8	2	1	19	28	16	29		
30	T		8	59	15	21	28	17	29	* ♂ ♀	

M	Jupiter	Venus	Partridge, June, 1789.	19
D	South	South		
1	3 31	0	1 Full Moon 7th Day at 8 Night.	
6	3 4	0	7 Last Quarter 15th Day at 7 Night.	
11	2 49	0	13 New Moon 23d Day at 8 Morning.	
16	2 32	0	19 First Quarter 29th Day at 12 Night.	
21	2 15	0	26 1st Day h S. 18 53, ♂ 21 41, ♀ 1 19.	
26	1 59	0	31 16th D. h S. 17 54, ♂ 21 22, ♀ 1 49.	

M	Lunar Aspects.					Clock	Moon	Drises	Observations.
D	☉	☿	♂	♀	♄	flow	South	& sets	
1		8	*		□	2 33	6a52	om 21	The good which I would prognosticate, is letters of advice to our merchants, that their good ships are severally arrived in safety to their destined ports; that their destined home-bound lading, is in good order, and great plenty; so being undoubtedly reasonable, is (or ought to be) a blessing to the merchant; his buyers, the retailers, their buyers, & more or less to the whole community. But alas, things were not always so.—Avarice is so connected with trade, that it is much easier to raise a price than to sink it. What I bought at an advanced price says the trader, I must sell off accordingly, otherwise I unavoidably sink in my fortune; well say I, sell that off, and then lower your price.
2	Δ			Δ		2 24	7 43	0 46	
3			□			2 14	8 34	1 10	
4			8		Δ	2 4	9 26	1 36	
5		Δ				1 54	10 20	2 7	
6			Δ			1 43	11 14	2 43	
D	8			8		1 33	morn.	Drises	
8	8	□				1 22	0 8	8a47	
9			Δ	8		1 10	1 1	9 29	
10		*	8			0 58	1 52	10 2	
11						0 47	2 41	10 29	
12	Δ		□	Δ		0 34	3 27	10 52	
13	D		*		Δ	0 22	4 10	11 12	
15	□	♂	Δ	□		0 10	4 52	11 31	
16		3				obef 3	5 33	11 50	
17				□		0 16	6 15	morn.	
18	*		□	*		0 29	6 58	0 10	
19			♂			0 42	7 43	0 33	
20		*	*	19	*	0 55	8 30	0 59	
D						1 8	9 21	1 30	
22	♂	□				1 21	10 15	2 9	
23	20		♂			1 34	11 11	2 58	
24		Δ	♂	*	♂	1 47	0a 9	D sets	
25			22		14	2 0	1 7	8a51	
26						2 13	2 4	9 28	
27	*			*		2 25	2 59	9 56	
D		8		Δ	*	2 38	3 52	10 21	
29	□		*			2 50	4 43	10 45	
30				□		3 2	5 34	11 9	
						3 14	6 25	11 34	

M	h	4	D
D	h	h	m
1	23	4	26
6	23	5	26
11	23	6	26
16	23	7	26
21	23	8	25
26	23	9	25

Behold the surly farmer stand,
And scowling o'er the sun-burnt land,
Cries all is parch'd in days bright blaze.
But let bright sol withdraw his rays;
How should things ripe? in language gruff,
Says he; why there's not sun enough.

M	W	Sundays and	☉	☽	☿	♄	♃	♂	♀	♁	Mutual Aspects
D	D	Remark. Days.	o	'	o	'	o	'	o	'	And Weather.
1	W	Tr. T. ends	9	56	29	29	9	29	18	29	Fine and plea-
2	T	Visit. B. V. M.	10	54	12	m	43	30	20	R	sant at the be-
3	F	Dog days begin	11	51	26	3	II	21	29		ginning.
4	S	Tr. of St. Mart.	12	48	9	4	10	1	22	29	Δ h ♀
5	D	4 S. aft. Trinity	13	45	22	4	2	23	28		O. M. S. day
6	M	Thos. a Becket	14	42	4	v	47	3	25	28	At the full of
7	T	[Cam. Com.]	15	39	17	19	3	26	28		the moon expect
8	W		16	37	29	41	4	27	27		♂ ♀ ♀
9	T		17	34	11	m	52	5	28	27	
10	F	Cam. T. com.	18	31	23	55	5	30	26		* 4 ♂
11	S		19	28	5	h	52	6	h	25	showers and
12	D	5 S. aft. Trin.	20	25	17	44	7	2	25		thunder in di-
13	M	Oxford Act	21	23	29	36	8	3	24		vers places.
14	T		22	20	11	γ	31	8	4	23	♂ ☉ ♀, Δ h ♀
15	W	Swithin	23	17	23	35	9	6	25		Δ ☉ h
16	T		24	14	5	h	52	10	7	22	♂ 4 ♀
17	F	Sun sets 8 1	25	12	18	27	10	8	21		
18	S	Oxf. T. ends	26	9	1	II	25	11	9	21	Then hot and
19	D	6 S. aft. Trin.	27	6	14	49	12	11	20		* ♂ ♀
20	M	Margaret	28	4	28	40	12	12	20		dry, showry;
21	T		29	1	12	h	58	13	13	19	but on the
22	W	Magdalen	29	58	27	39	14	14	19		whole expect
23	T		0	h	56	12	h	34	14	16	good harvest
24	F	Sun rises 4 8	1	53	27	36	15	17	19		weather.
25	S	St. James	2	50	12	m	34	16	18	19	
26	D	7 S. aft. Trin.	3	48	27	20	16	19	D		St. Anne
27	M		4	45	11	2	48	17	20	19	
28	T	Sun sets 7 46	5	43	25	55	8	22	19		
29	W		6	40	9	m	40	18	23	19	
30	T	Day breaks 1 0	7	37	23	4	19	24	20		
31	F		8	35	6	4	1	20	25	20	

M <i>Jupiter</i> D South		<i>Venus</i> South		Partridge, July 1789. 21
1	1 42	0	37	Full Moon 7th Day at 9 Morning.
6	1 26	0	43	Last Quarter 15th Day at 11 Morning.
11	1 10	0	48	New Moon 22d Day at 4 Afternoon.
16	0 55	0	53	First Quarter 29th Day at 6 Morning.
21	0 39	1	0	1st Day $\frac{1}{2}$ S. 16 53, $\frac{1}{2}$ 21 4, $\frac{1}{2}$ 1 19.
26	0 23	1	4	16th D. $\frac{1}{2}$ S. 15 51, $\frac{1}{2}$ 20 46, $\frac{1}{2}$ 23 41.

M. Lunar Aspects.						Clock	Moon	Driles	Observations.
D	☉	☿	♂	♀	♂	fast	South	& sets	
1						3 26	7a18	morn.	Nay, replies he, commerce is ever fluctuating, and when I have sold that off, as I can afford to keep the rest by me, I shall not be for lowering my prices, as the next year may be a very bad one. The merchants too may have great losses at sea, perhaps by tempests, perhaps by captures, and although they may insure their cargo, these goods will be a rising commodity.
2	Δ	Δ		Δ		3 37	8 9	0 6	
3			Δ		Δ	3 48	9 2	0 37	
4						3 58	9 56	1 18	
D		□				4 9	10 49	2 10	
6	8					4 19	11 40	3 2	
7	21	*		8	8	4 28	morn.	Drises	
8			8	Δ		4 37	0 29	8a25	
9						4 46	1 16	8 50	
10						4 55	2 0	9 12	
11			□			5 3	2 43	9 32	Well, my friend, be it so, to all who deal in the superfluities of life, let them set their own price but those who deal in its absolute necessities, never let them listen to the voice of monopoly. God Almighty looks upon the poor, and their carles, when they are justly poured out, as so many religious oblations to his own meditations.
D	Δ	♂			Δ	5 10	3 25	9 50	
13		11	Δ	*	Δ	5 17	4 6	10 11	
14						5 24	4 48	10 31	
15	□				□	5 30	5 31	10 55	
16			□		□	5 36	6 16	11 24	
17	*	*		*	*	5 41	7 4	11 58	
18			*	♂	*	5 46	7 56	morn.	
D		□		19		5 50	8 51	0 42	
20						5 54	9 48	1 36	
21		Δ			♂	5 57	10 47	2 42	Drises
22	♂		♂		11	6 0	11 46	3 44	
23	4		18	*	♂	6 2	0 44	7a54	
24					5	6 3	1 39	8 22	
25		8		□	*	6 4	2 33	8 48	
D	*		*			6 4	3 26	9 11	
27				Δ	*	6 4	4 18	9 37	
28					□	6 3	5 11	10 6	
29	□		□		Δ	6 1	6 4	10 38	
30		Δ			□	5 19	6 57	11 17	
31	Δ		Δ			5 56	7 50	morn.	

22 AUGUST hath xxxi Days.

Yet heav'n's in mercy pleas'd to serve,
Mortals with more than they deserve ;
When spring with soft and gentle fires
Has rais'd each plant, she then retires ;
And summer oft with cooling rains
Obstructs sol's force, and clears the plains.

M	h	u	d
D	×	Ω	m
1	23	11	25
6	22	12	24
11	22	13	24
16	22	15	24
21	22	15	24
26	21	16	23

M	W	Sundays and	○	Ω	D	↑	♂	♀	♀	Mutual Aspects	
D	D	Remark. Days	q.	o	/	π	Ω	⊖		And Weather.	
1	S	Lammas day	9	32	19	†	1	20	27	21	Fine weather.
2	D	8 S. aft. Trin.	10	30	1	38	21	28	22		♂ ⊙ ♀
3	M	Day breaks 1 36	11	27	14	4	22	29	22		Δ ½ ♀
4	T	Sun rises 4 25	12	25	26	22	22	22	23		□ ½ ♂
5	W		13	22	8	32	23	1	24		Hail or rain,
6	T	Transfiguration	14	20	20	34	24	3	26		perhaps thun-
7	F	Prs. Am. b.	15	17	2	32	24	4	27		Name of Jesus
8	S		16	15	14	25	25	5	28		der.
9	D	9 S. aft. Trin.	17	12	26	16	26	6	30		Windy.
10	M	St. Lawrence	18	10	8	7	26	8	Ω		Dog days end
11	T	Prs. Brunf. b.	19	7	20	1	27	9	3		
12	W	Pr. of Wales b.	20	5	2	8	3	28	10		Old Lammas
13	T	Day ends 9 49	21	3	14	18	28	11	6		Winds with
14	F		22	0	26	49	29	13	8		some wet.
15	S	Assumption	22	58	9	43	30	14	10		
16	D	10 S. aft. Trin.	23	56	23	3	⊖	15	12		D. York b.
17	M		24	54	6	53	1	16	13		♂ ¼ ♀
18	T	Sun sets 7 11	25	52	21	12	2	17	5		
19	W	Day breaks 2 29	26	49	5	58	2	19	17		Hot and dry.
20	T		27	47	21	4	3	20	19		
21	F	P. W. Henry b.	28	45	6	20	4	21	21		8 ½ ♀
22	S	Sun rises 4 56	29	43	21	35	4	22	23		
23	D	11 S. aft. Trin.	om	41	6	38	5	24	25		Winds and re-
24	M	St. Bartholo.	1	39	21	21	6	25	27		freshing show-
25	T		2	37	5	38	6	26	29		ers.
26	W	Sun sets 6 56	3	35	19	29	7	27	22		
27	T		4	33	2	54	7	28	3		
28	F	St. Augustine	5	31	15	57	8	30	5		♂ ⊙ ♀
29	S	Beh. Jo. Bapt.	6	29	28	40	9	2	7		
30	D	12 S. aft. Trin.	7	27	11	7	9	2	9		* ♂ ♀
31	M		8	25	23	23	10	3	11		

Jupiter **Venus**
D South South

1	0	5	1	9	Full Moon 5th Day at 10 Night.
6	23	48	1	13	Last Quarter 14th Day at 2 Morning.
11	23	33	1	17	New Moon 20th Day at 11 Night.
16	23	19	1	21	First Quarter 27th Day at 3 Afternoon.
21	23	4	1	26	1st Day 1/2 S. 14 46, ♂ 20 30, ♀ 20 40.
26	22	50	1	30	16th Day 1/2 S. 13 46, ♂ 20 15, ♀ 23 16.

M	Lunar Aspects						Clock	Moon	Drifts	Observations.
D	☉	☿	♈	♉	♊	♋	fast	South	& sets	
1		☐		8	Δ		5 52	8 43	0m 2	It may here be said, that I have wander'd too far from my purpose. That instead of minding the merchant, the trader, the monopolizer, and the Lord knows who, I should have been minding my stars all this while.
D							5 48	9 34	0 55	
3						8	5 43	10 23	1 53	
4		*					5 38	11 10	2 55	
5	8		8				5 32	11 56	Drifts	
6	10			Δ			5 25	morn	7 17	
7					8		5 18	0 40	7 38	
8		♂					5 10	1 22	7 58	
D		16		☐		Δ	5 2	2 4	8 17	
10			Δ				4 53	3 46	8 38	
11	Δ			*			4 44	3 29	9 0	My answer is, I have, and you will see at the opening of the month a trine of Saturn and Mercury, which gives me the idea of an old rogue who got his living by monopoly, and as the expression is, grinding the face of the poor, advising with a young rogue the biggest thief of them all, in the most friendly manner.
12					Δ	☐	4 34	4 13	9 28	
13			☐				4 24	5 0	9 59	
14	☐	*					4 13	5 49	10 40	
15		*	*		☐	*	4 1	6 41	11 26	
D	*	☐		♂			3 49	7 36	morn.	
17				14	*		3 37	8 32	0 23	
18		Δ					3 24	9 30	1 32	
19			♂			♂	3 10	10 28	2 50	
20	♂		21	*		21	2 56	11 25	Drifts	
21	11						2 42	on 22	6 50	Has he advised him properly? He certainly has—and as a proof of it, you see him next in an angry quartile with Mars. War is an enemy to
22		8			♂		2 27	1 18	7 18	
D		*	☐	0			2 12	2 13	7 44	
24					*		1 56	3 7	8 12	
25	*		☐	Δ			1 40	4 1	8 43	
26		Δ			*	☐	1 23	4 56	9 22	
27	☐						1 6	5 51	10 7	
28		☐	Δ				0 49	6 44	10 57	
29				8	☐	Δ	0 31	7 36	11 53	
D	Δ						0 19	8 26	morn.	
31		*					0 5	9 14	0 54	

24 SEPTEMBER hath xxx Days.

M	h	24	h
D	h	h	m
1	21	17	23
6	20	18	23
11	20	19	23
16	20	20	22
21	19	21	22
26	19	22	22

Now busy swains again prepare
To reap the labours of the year;
And summer, now no more a guest,
Flies, and to autumn leaves the rest;
The purple God their care regards;
And all their former toil rewards.

M	D	W	D	Sundays and Remark. Days.	☉	☿	♂	♀	♂	♀	Mutual Aspects And Weather		
1	T			Giles Abbot	9	23	5	30	11	5	13	Wet and windy	
2	W			Lon. burn. 1666	10	21	17	31	11	6	15	at the begin-	
3	T				11	20	29	27	12	7	16	ning.	
4	F			D. breaks 3 15	12	18	11	20	12	8	18	* ☉ ♂	
5	S			Sun rises 5 23	13	16	23	12	13	9	20	8 h ♀	
6	D			13 S. aft. Trin.	14	14	5	3	14	11	22	Moderate.	
7	M			Enurchus.	15	13	16	57	14	12	24		
8	T			Nat. B. V. M.	16	11	28	54	15	13	25		
9	W				17	9	10	8	59	15	14	27	Rain.
10	T			Sun sets 6 28	18	8	23	15	16	16	29	☐ ♂ ♀	
11	F			Day ends 8 26	19	6	5	11	46	17	17	2	8 ☉ h
12	S				20	5	18	37	17	18	2	2	Pleasant and
13	D			14 S. aft. Trin.	21	3	1	51	18	19	4	5	* 2 ♀
14	M			Holy Cross	22	2	15	33	19	20	5	5	serene weather
15	T				23	0	29	43	19	22	7	7	Δ h ♂
16	W			Ember week	23	59	14	20	20	23	9	9	
17	T				24	58	29	19	20	24	10	10	Sudden rains;
18	F			Lambert.	25	56	14	23	21	25	12	12	
19	S			D. breaks 3 52	26	55	29	50	22	27	13	13	
20	D			15 S. aft. Trin.	27	54	15	0	22	28	15	15	wet and drif-
21	M			St. Matthew	28	53	29	53	23	29	16	16	ling.
22	T			K. G. III. crow.	29	52	14	21	23	21	18	18	
23	W				0	50	28	22	24	1	19	19	
24	T			Sun rises 6 0	1	49	11	55	24	3	21	21	* 2 ♀
25	F				2	48	25	2	25	4	22	22	
26	S			St. Cyprian	3	47	7	46	26	5	24	24	Rough winds.
27	D			16 S. aft. Trin.	4	46	20	12	26	6	25	25	
28	M				5	45	2	24	27	8	27	27	☐ ♂ ♀
29	T			St. Michael	6	44	14	26	27	9	28	28	Prs. C. Au. M.
30	W			St. Jerome	7	43	26	22	28	10	29	29	

M	Jupiter	Venus	Partridge, September 1789.	25
D	South	South		
1	22 34	I 34	Full Moon 4th Day at 2 Afternoon.	
6	22 20	I 38	Last Quarter 12th Day at 3 Afternoon.	
11	22 6	I 43	New Moon 19th Day at 7 Morning.	
16	21 53	I 47	First Quarter 26th Day at 4 Morning.	
21	21 38	I 52	1st Day h S. 12 44, ♂ 20 1, ♀ 0 15.	
26	21 24	I 57	16th D. h S. 11 45, ♂ 19 17 ♀ 0 54	

M	Lunar Aspects.						Clock	Moon	Miles	Observations.
D	☉	☿	♄	♊	♋	♌	flow	South	& less	
1					Δ		0 24	10a 0	1m 59	trade, at the same time
2			8				0 43	10 44	3 5	it is its protector, but
3							1 21	11 27	4 10	want of room forbids
4	8	4		Δ		8	1 22	morn.	1 rises	any more upon this
5	2	19					1 42	0 10	6a 30	subject.
D				□	8		2 12	0 52	6 52	This month enters
7			Δ				2 22	1 34	7 15	with a pleasing sex-
8							2 42	2 18	7 39	tile of the bright God
9	*	*	□	*			3 3	3 4	8 9	of day, and the Cœ-
10						Δ	3 23	3 52	8 45	lestial warrior, we
11							3 44	4 42	9 28	have likewise in the
12	□	□	*		Δ		4 5	5 35	10 21	course of this month,
D						□	4 26	6 29	11 25	two more Sextiles and
14	Δ	Δ		♄	□	*	4 47	7 25	morn.	Trine of harmonious
15				♄	*		5 8	8 21	0 36	import; to balance
16			♄	5	*		5 29	9 17	1 52	which, we have two
17			10				5 50	10 18	3 15	oppositions, in both
18	♄	8		*			6 10	11 8	4 38	of which furly Sa-
19	19						6 31	0a 4	5 sets	turn is engaged, and
D			*	□	♄	♄	6 52	1 1	6a 21	as many malignant
21					23	0	7 13	1 57	6 52	squares in which I
22		Δ	□	Δ			7 33	2 54	7 28	find Mars is concern-
23	*						7 54	3 50	8 10	ed; so England need
24		□	Δ		*		8 14	4 45	9 0	not fear lying idle.
25				*			8 35	5 39	9 56	The quartile of ♂
26	□						8 55	6 31	10 57	to ♀ threatens mis-
D		*	8	□			9 15	7 21	morn.	chief to an eminent
28	Δ			□			9 34	8 8	0 1	person of the fair sex;
29		8					9 54	8 53	1 7	perhaps by divorce;
30				Δ			10 13	9 37	2 12	while the malignant

6 OCTOBER hath xxxi Days:

M	h	u	D
D	h	u	m
1	18	23	21
6	18	24	21
11	18	25	21
16	18	26	21
21	17	27	20
26	17	27	20

The various fruits, the mead, the plain,
Or field, or orchard did contain;
Now pluc'd, or reap'd, and safe got in;
And swains the harvest song begin;
The gen'rous Autumn quits the shore,
And hoary Winter comes once more.

W	Sundays and	☉	☿	♂	♀	♂	Mutual Aspects
D	Remark. Days.	o	'	o	'	☿	And Weather.
1	T Remigius	8	42	8	14	28	1 Wind and rain
2	F	9	41	20	6	29	2 at the begin-
3	S Day break 4 24	10	41	17	58	30	3 ning.
4	D 17 S. aft. Trin.	11	40	13	54	31	4
5	M	12	39	25	55	1	5
6	T Faith	13	38	8	8	1	6
7	W Sun rises 6 26	14	38	20	16	2	7 ☐ h ♀
8	T	15	37	2	11	42	8 Cloudy, with
9	F St. Denys	16	36	15	20	3	9 rain.
10	S Ox. & Cam. T.b.	17	36	28	15	3	10 O. Mich. d.
11	D 18 S. aft. Trin.	18	35	11	26	29	11 Windy.
12	M	19	35	25	4	5	12 ☐ 24 ♀
13	T Tr. K. Edward	20	34	9	3	5	13 Snow or sleet.
14	W	21	34	23	24	6	14
15	T Sun sets 6 41	22	33	8	12	5	15 Δ h ♀
16	F	23	33	23	0	7	16 * ♀ ♀
17	S Etheldred	24	33	8	2	7	17 † 19 More calm.
18	D 19 S. aft. Trin.	25	32	23	2	8	18 S. Luke, * ☉ 24
19	M	26	32	7	11	51	19
20	T Day break 4 59	27	32	22	21	9	20 Cloudy, with
21	W Sun rises 6 53	28	32	6	†	28	21 rain or snow;
22	T	29	32	20	8	10	22
23	F Sun sets 5 4	30	31	3	19	22	23 rough winds
24	S	1	31	16	12	11	24
25	D 20 S. aft. Trin.	2	31	28	42	11	25 R K.G.III. acc,
26	M K. G. III. proc.	3	31	10	55	12	26 [Crispin
27	T	4	31	22	57	12	27 Δ ♂ ♀
28	W St. Sim. & Jude	5	31	4	†	51	28 towards the
29	T	6	31	16	42	13	29 end.
30	F Sun Sets 4 51	7	31	28	34	14	30 Δ h ♀
31	S Day ends 6 44	8	31	10	10	30	31

M	Jupiter	Venus	Partridge, October, 1789. 27	
D	South	South		
1	21	9	2	2 Full Moon 4th Day at 7 Morning.
6	20	54	2	8 Last Quarter 12th Day at 2-Morning.
11	20	39	2	13 New Moon 18th Day at 4 Afternoon.
16	20	23	2	20 First Quarter 25th Day at 8 Night.
21	20	8	2	27 1st Day $\frac{1}{2}$ S. 10 48, δ 19 30, ξ 1 20.
26	19	52	2	33 16th D. $\frac{1}{2}$ S. 9 49, δ 19 8, ξ 1 31.

M	Lunar Aspects.					Clock	Moon	Driles	Observations.
D	\odot	$\frac{1}{2}$	$\frac{1}{4}$	δ	η	flow	South	& sets	
1		1			Δ	10 32	10 19	3m 17	be about this time too
2		20		Δ		10 51	11 0	4 21	much in vogue. If
3	8					11 9	11 42	5 25	every one had their
D	19		Δ			11 27	morn.	Drises	desert, it might pro-
5			\square			11 45	0 26	5 53	duce a scarcity of
6				8	8	12 2	1 11	6 22	hemp; where every
7	*	\square				12 19	1 58	6 55	ones with is <i>peace</i> and
8				*		12 36	2 47	7 36	<i>plenty</i> . Now if about
9	Δ	\square	*			12 52	3 38	8 24	this time a fly piece of
10						13 7	4 31	9 21	villainy which has
D		Δ			Δ	13 22	5 25	10 29	been <i>in ovo</i> sometime,
12	\square		δ	Δ		13 36	6 20	11 40	and miscarried in the
13			17	\square		13 50	7 14	morn.	hatching, should come
14	*	δ		\square		14 4	8 8	0 59	to light, I shall not
15		8	3		*	14 16	9 2	2 19	wonder; neither be
16					*	14 29	9 56	3 40	sorry if the actors
17				*		14 40	10 50	5 2	meet their just reward.
D	δ		*			14 51	11 46	Drises	Jupiter, in opposi-
19	4	Δ	\square		δ	15 2	12 44	5 29	tion to Venus, says a
20			\square	δ	21	15 11	1 42	6 10	celebrated astrologer,
21			Δ	22		15 20	2 39	6 56	creates wranglings,
22		\square	Δ			15 29	3 35	7 51	law-suits, and oblique
23	*					15 36	4 29	8 52	consultations; raising
24	*	*			*	15 43	5 20	9 56	various reports, and
D	\square					15 50	6 8	11 0	setting mischief on
26			8	*		15 55	6 54	morn.	foot. If this be true,
27		8		\square		16 0	7 38	0 6	I don't see but the
28	Δ			\square		16 5	8 20	1 12	malign-influence of a
29		δ			Δ	16 8	9 2	2 15	quadrant aspect, may
30		1				16 11	9 44	3 20	produce the same ef-
31			Δ	Δ		16 13	10 27	4 25	fect. We have how-

M	h	4	D
D	h	h	m
1	17	28	20
6	17	29	20
11	17	29	19
16	17	30	19
21	17	nx	19
26	17	1	19

Just as rolls on the circling year,
 Ev'n so in age will life appear.
 The spring of youth will soon be o'er,
 And manhoods summer be no more;
 Life's autumn quickly shall decay,
 And strength and spirits then give way.

M	W	Sundays and	☉	☽	☿	♂	♀	☿	Mutual Aspects And Weather.
D	D	Remark. Days.	o	'	o	'	h	m	
1	D	21 S. aft. Trin.	9	32	22	32	15	19	All Saints.
2	M	Pr. Edw. born	10	32	4	42	15	20	All Soul. Δ h ♀
3	T	Prs. Sophia b.	11	32	17	3	16	21	☐ ♂ ♀
4	W	Sun rises 7 18	12	32	29	34	16	22	
5	T	Powder Plot	13	32	12	18	17	23	♂ ☉ ♀
6	F	Leonard	14	33	25	15	17	25	Mich. T. b.
7	S	D. Cumb. b.	15	33	8	25	17	26	
8	D	22 S. aft. Trin.	16	33	21	49	18	27	Prs. Aug. S. b.
9	M	Ld. Mayor's day	17	34	5	29	18	28	
10	T		18	34	19	23	19	29	☐ ☉ ♂, Δ ♀
11	W	St. Martin	19	35	3	32	19	30	Dark & some
12	T	Sun sets 4 28	20	35	17	53	20	2	downfall about
13	F	Britius	21	36	2	23	20	3	this time
14	S		22	36	16	58	20	4	D
15	D	23 S. aft. Trin.	23	37	1	33	21	5	Machutus
16	M		24	37	16	2	21	6	
17	T	Hugh Bp. Linc.	25	38	0	19	22	8	Unsettled for
18	W		26	39	14	19	22	9	some days:
19	T		27	39	27	58	22	10	then somewhat
20	F	Edmund K. & M.	28	40	11	14	23	11	mild.
21	S		29	41	24	8	23	12	☐ ☉ 4
22	D	24 S. aft. Trin.	0	41	6	42	24	14	Cecilia. O. Mart.
23	M	St. Clement	1	42	18	59	24	15	* h ♀
24	T		2	43	1	2	24	16	
25	W	D. of Glou. b.	3	44	12	57	25	17	Catharine.
26	T	Sun rises 7 53	4	45	24	48	25	18	Δ h ♀
27	F	Day break 5 50	5	45	6	41	25	19	Concludes with
28	S	Mich. Ter. ends	6	46	18	38	26	21	rough winds
29	D	Advent Sunday	7	47	0	45	26	22	and tempests.
30	M	St. Andrew	8	48	13	5	26	23	

M	Jupiter	Venus	Partridge, November, 1789. 29	
D	South	South		
1	19 32	2 41	Full Moon 2d Day at 12 Night.	
6	19 14	2 47	Last Quarter 10th Day at 10 Morning.	
11	18 56	2 53	New Moon 17th Day at 3 Morning.	
16	18 36	2 58	First Quarter 24th Day at 4 Afternoon.	
21	18 19	1 6	1st Day $\frac{1}{2}$ S. 8 45, δ 18 41, ϵ 0 35.	
26	17 59	1 10	16th D. $\frac{1}{2}$ S. 7 43, δ 18 7, ϵ 22 49.	

M	Lunar Aspects.					Clock	Moon	Drises	Observations.
D	\odot	$\frac{1}{2}$	$\frac{1}{4}$	δ	ϵ	flow	South	& sets	
D			Δ			16 14	11 12	5m30	companion of hope,
2	8					16 14	11 59	Drises	till time shew the
3	12	*		\square	8	16 14	morn.	5a 1	event.
4			\square			16 12	0 48	5 38	Two quadratures,
5		\square		*		16 10	1 39	6 25	in which Mars is con-
6			*		8	16 7	2 31	7 19	cerned, are potent and
7	Δ	Δ			Δ	16 3	3 24	8 21	malignant aspects,
D				δ	\square	15 59	4 17	9 32	importing much evil
9			δ	23	Δ	15 53	5 10	10 46	to mankind, divisions
10	\square		δ		*	15 47	6 3	morn,	and dissensions are
11		17			*	15 39	6 55	0 3	likely to be too ripe,
12	*	8				15 31	7 47	1 21	both in a political
13				\square		15 22	8 39	2 41	line, and in points of
14			*	*		15 12	9 32	4 1	a religious nature;
D			*	*	δ	15 1	10 27	5 22	and, believe me, the
16	δ	Δ	\square	\square	8	14 50	11 24	6 40	devil has never more
17	15			Δ		14 37	0a21	Drises	mischiefs in his heart,
18		\square				14 24	1 18	5a34	than when he puts on
19			Δ		*	14 10	2 14	6 33	a black gown. Of
20	*			20		13 55	3 8	7 37	all calamitous wars
21	*			0		13 39	3 58	8 42	and commotions those
D				\square		13 23	4 45	9 49	are the worst, which
23			8			13 6	5 30	10 55	have religion for their
24	\square		8		Δ	12 48	6 13	morn.	pretence. And not
25		δ		*		12 29	6 55	0 0	to mention the horrid
26		7				12 9	7 36	1 4	massacres and execra-
27	*					11 49	8 18	2 7	ble barbarities, used
28			Δ	\square		11 29	9 1	3 11	too often by the Ca-
D		Δ				11 7	9 47	4 16	tholics, under pre-
30	*			Δ	8	10 45	10 35	5 21	tence of exterminat-
									ing heresy; London
									has not forgot, what
									havock was made in
									a Protestant city by a

30 DECEMBER hath xxxi Days.

To wintry age, when all before
That charin'd, shall cease, and charm no more,
The palsy'd limb, the frozen vein,
Comes death to ease, and close the scene:
Then happy all prepar'd to rise
To realms of joy in brighter skies.

M	h	4	D
1	17	1	18
6	17	1	18
11	17	1	18
16	17	1	17
21	17	1	17
26	17	1	17

M	W	Sundays and	☉	☿	♂	♀	☿	Mutual Aspects
D	D	Remark. Days.	o	'	o	'	o	And Weather.
1	T	Day break 5 54	9	49	25	8	39	27 24 22
2	W	Sun rises 7 58	10	50	8	11	30	27 25 24
3	T		11	51	21	-	37	27 26 25
4	F	Sun sets 4 0	12	52	4	25	59	28 27 27
5	S	Day ends 6 4	13	53	18	36	28	29 28
6	D	a S. in Advent	14	54	2	28	23	28 30 30
7	M		15	55	16	20	28	28 27 27
8	T	Conc. B. V. M.	16	56	0	12	23	29 2 3
9	W		17	57	14	30	29	3 4
10	T	Day break 5 52	18	58	28	40	29	4 6
11	F	Sun rises 8 5	19	59	12	51	29	5 7
12	S		21	0	27	0	30	7 9
13	D	a S. in Advent	22	1	11	11	6	30 8 10
14	M	Sun sets 3 53	23	2	15	6	12	9 12
15	T		24	3	8	4	58	0 10 13
16	W	O Sapi. C. T. e.	25	4	22	37	0	11 15
17	T	Cxf. T. ends	26	6	6	19	3	1 12 16
18	F		27	7	19	11	1	13 18
19	S	Day ends 5 59	28	8	2	2	1	14 19
20	D	a Sun. in Advent	29	9	14	35	1	16 21
21	M	St. Thomas	0	10	26	52	1	17 22
22	T		1	11	8	56	1	18 24
23	W	Day break 6 1	2	13	20	51	2	19 26
24	T	Sun rises 8 8	3	14	2	42	2	20 27
25	F	Christmas day	4	15	14	33	2	21 29
26	S	St. Stephen	5	16	26	30	2	22 19
27	D	a S. aft. Christ.	6	17	8	38	2	23 2
28	M	Holy Innocents	7	18	21	2	2	24 3
29	T		8	20	3	45	2	25 5
30	W	Sun sets 3 54	9	21	16	49	2	26 7
31	T	Silvester	10	22	0	56	2	27 8

M	Jupiter	Venus	Partridge, December 1789.	
D	South.	South.		
1	17 38	3 13	Full Moon 2d Day at 9 Afternoon.	
6	17 17	3 15	Last Quarter 9th Day at 6 Afternoon.	
11	16 55	3 17	New Moon 16th Day at 5 Afternoon.	
16	16 32	3 18	First Quarter 24th Day at Afternoon.	
21	16 12	3 18	1st Day $\frac{1}{2}$ S. 6 40, δ 17 23, ϵ 22 50.	
26	15 49	3 18	16th D. $\frac{1}{2}$ S. 5 37, δ 16 33, ϵ 23 17.	

M	Lunar Aspects.						Clock	Moon	Driles	Observations.
D	\odot	$\frac{1}{2}$	$\frac{1}{4}$	δ	ϵ	γ	slow	South	& sets	
1			\square	\square			10 22	11 25	6 26	pretended Protestant as sociation: but to co- vince the world it was all a force, their g and leader turned Jew.
2	8	\square					9 59	morn.	Driles	
3	5		*	*			9 35	0 17	5 6	
4							9 10	1 11	6 9	To conclude our dis- sertation for this year, upon the Cælestial af- pects; we cannot help observing, that the po- sitions and configura- tions are of such a mix- ed nature, and double signification, that no- thing positive can be determined by any who would not hazard his credit for veracity.— Some good, and many ills, in the course of the year, before the arrival of this time will appear, which the stars in their courses had foretold, al- though the judgment of man could not deter- mine either the where or the when.
5	Δ			δ	Δ		8 45	2 6	7 16	
6							8 19	3 0	8 29	
7	Δ			δ			7 53	3 53	9 44	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
8			δ	21		\square	7 26	4 44	11 1	
9	\square	8	2				6 59	5 35	morn.	
10					Δ	*	6 32	6 25	0 18	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
11	*						6 4	7 17	1 37	
12			*	*	\square		5 35	8 8	2 53	
13	Δ						5 6	9 2	4 11	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
14			\square	\square			4 37	9 57	5 24	
15	\square			*	δ		4 8	10 53	6 33	
16	δ		Δ	Δ		8	3 36	11 50	D. sets	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
17	5						3 9	0 44	5 0	
18	*						2 39	1 36	6 12	
19							2 9	2 25	7 20	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
20				δ	*		1 39	3 11	8 26	
21	*		8	8	2		1 9	3 55	9 32	
22		δ					0 38	4 37	10 36	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
23		17			\square		0 8	5 18	11 39	
24	\square						obef. 22	6 0	morn.	
25				*			0 52	6 42	0 43	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
26			Δ	Δ		4	1 22	7 26	1 45	
27	Δ	*					1 51	8 12	2 51	
28			\square	\square	\square		2 21	9 1	3 55	God preserve this good land from devasta- tions of fire. May we all fear God and honour the King. And how- ever things may pro- ceed in public, may we every one in private life do that which is right.
29							2 50	9 52	5 0	
30	\square				Δ		3 19	10 46	5 56	
31			*	*		8	3 47	11 42	6 49	right.

A Compendious Chronology of the most principal Epochs and Æras, with their Beginnings, reduced and fixed to the Years of the Julian Period, the Creation of the World, and to the Years before and after Christ.

	Julian Period	no An- di	Ante Christ.
T HE Creation of the World after the Jews	953	1	3764
The Common Epocha of the Creation	765	1	3954
The same by the Greek Emperors	788	1	3930
The same in Mr. Bedford's Scripture Chronology	707	1	4011
The same in Bishop Usher's Annals	711	1	4008
The Deluge, or Noah's Flood	2363	1658	2355
Porphyrius's Caldaic Epocha	2481	1718	2204
The Assyrian Monarchy by Nimrod	2666	1961	2052
The Birth of Abraham	2715	2010	2003
Joseph sold into Egypt	2987	2282	1732
The Israelites 400 Years Servitude in Egypt	2820	2115	1898
The Kingdom of Argos founded by Inachus	2858	2153	1860
The Birth of Moses	3144	2439	1575
The Kingd. of Athens founded by Cecrops	3158	2453	1560
The Israelites Departure out of Egypt	3220	2515	1498
Their Entrance into Canaan, or the Jubilee	3259	2554	1459
The Destruction of Troy	3531	2826	1187
The first sabbatical Year	3261	2558	1455
The Jewish High Priesthood	3301	2604	1409
The Reign of King David	3647	2942	1071
The Foundation of Solomon's Temple	3699	2994	1019
The Varronian Epocha	3961	3198	815
The Catonian Epocha	3962	3199	814
The Epocha of Nabonassar	3967	3262	751
The Olympiads	3939	3234	779
The Building of Rome	3963	3258	755
The Destruction of the Kingdom of Israel	3993	3288	725
The Beginning of Nebuchadonosor	4106	3301	712
The Babylonish Captivity	4109	3303	710
The Destruction of Solomon's Temple	4127	3422	591

	Julian Period	Anno Mund	Ante Christi
Daniel delivered from the Den of Lions	4176	3470	538
The Temple of Jerusalem rebuilt -	4198	3488	520
Cyrus the Founder of the Persian Monarchy	4178	3472	536
The Regifugium Epocha - - - -	4205	3500	508
The Battle at Marathon - - - -	4223	3517	491
Xerxes's Defeat at the Battle of Salamis	4234	3528	480
The Beginning of the Peloponnesian War	4281	3575	433
Meto the Athenian began his Circle -	4282	3576	432
Daniel's 70 Weeks of Years began -	4269	3564	444
The Beginning of the Callippick Period	4383	3677	331
The Death of Alexander - - - -	4390	3684	324
The Grecian Epocha of the Seleucida	4402	3695	312
The Æra of the Asmoneans or Maccabees	4548	3841	166
The Epocha of Simon - - - -	4570	3865	143
The Julian Epocha, or Correct Callend.	4669	3962	46
The Beginning of the Reign of Herod	4677	3970	37
The Spanish Æra - - - -	4676	3969	36
The Battle of Actium - - - -	4683	3976	31
The taking of Alexandria - - - -	4684	3977	30
The Epocha of the Title of Augustus -	4687	3980	27
The true Birth of CHRIST - -	4710	4005	4
The Vulgar or Dionysian Years of Christ	4714	4009	Anno Christi
The Passion or Death of Christ - -	4746	4041	33
The Destruction of Jerusalem - -	4783	4078	70
The Dioclesian or Æra of Martyrs -	4997	4292	284
The Dioclesian Persecution - - -	5015	4310	302
The Epocha of Constantine the Great	5019	4314	306
The Council of Nice - - - -	5038	4333	325
The Encænian of Constantinople - -	5043	4338	330
Phocas makes Pope Boniface Head of the Church - - - - - }	5319	4614	606
Mahomet broaches his Imposture at Mecca	5321	4616	608
The Epocha of the Hegira - - - -	5335	4630	622
The Epocha of Yesdejerd - - - -	5345	4640	632
The Jellalæan or Gelælæan Epocha -	5792	5087	1079
The Epocha of the Reformation - -	6230	5525	1517
The Revolution effected by King William	6401	5696	1688
The British Epocha, or correct Kalendar	6465	5760	1752

A TABLE of HOUSES for the Latitude of 51 Degrees 32 Minutes, according to the Doctrine of *Ptolemy*, serving the City of London, &c.

☉ in ♈										☉ in ♉												
Time from noon.		10	11	12	Ascen			1	2	3	Time from noon		10	11	12	Ascen			1	2	3	
		☉	♈	♏	☉	♏	♏	☉	♏	♏			♏	♏	☉	☉	♏	♏	☉	♏	♏	
h	m	gr	gr	gr	gr	m	gr	gr			h	m	gr	gr	gr	gr	m	gr	gr			
0	0	0	9	22	26	42	12	3			1	52	0	9	17	16	31	4	28			
0	4	1	10	23	27	43	13	3			1	55	1	10	18	17	11	5	29			
0	7	2	11	24	28	2	14	4			1	59	2	11	19	17	51	6	30			
0	11	3	12	25	28	48	15	5			2	3	3	12	19	18	31	7	1			
0	15	4	13	25	29	21	15	6			2	7	4	13	20	19	12	8	2			
0	18	5	14	26	0	Ω	1	6			2	12	5	14	21	19	52	9	3			
0	22	6	15	27	0	40	17	8			2	15	6	15	22	20	32	9	4			
0	26	7	16	28	1	20	18	8			2	19	7	16	22	21	13	10	5			
0	29	8	17	29	2	0	18	9			2	22	8	17	23	21	54	11	6			
0	33	9	18	☉	2	39	19	10			2	26	9	18	24	22	35	11	7			
0	37	10	19	1	3	19	20	11			2	30	10	19	25	23	16	12	8			
0	40	11	20	1	3	59	20	12			2	34	11	20	25	23	57	13	9			
0	44	12	21	2	4	38	21	13			2	38	12	21	26	24	38	14	10			
0	48	13	22	3	5	17	22	14			2	42	13	22	27	25	19	14	11			
0	51	14	23	4	5	57	23	15			2	46	14	23	28	26	0	15	12			
0	55	15	24	5	6	36	23	15			2	50	15	24	29	26	42	16	12			
0	59	16	25	6	7	15	24	16			2	54	16	25	29	27	24	17	13			
1	3	17	26	6	7	55	25	17			2	58	17	26	Ω	28	6	18	14			
1	6	18	27	7	8	39	26	18			3	2	18	27	1	28	47	18	15			
1	10	19	28	8	9	14	26	19			3	6	19	28	2	29	30	19	16			
1	14	20	29	9	9	53	27	19			3	10	20	29	3	0	♏	13	20	17		
1	18	21	☉	10	10	34	28	20			3	14	21	29	3	0	55	21	18			
1	21	22	1	10	11	12	28	21			3	18	22	☉	4	1	37	22	18			
1	25	23	2	11	11	52	29	22			3	22	23	1	5	2	20	22	19			
1	29	24	3	12	12	32	☉	23			3	26	24	2	6	3	2	23	20			
1	33	25	4	13	13	12	1	24			3	31	25	3	7	3	46	24	21			
1	36	26	5	14	13	52	1	25			3	35	26	4	7	4	29	25	22			
1	40	27	6	14	14	32	2	25			3	39	27	5	8	5	12	26	23			
1	44	28	7	15	15	12	3	26			3	43	28	6	9	5	5	27	24			
1	48	29	8	16	15	51	4	27			3	47	29	7	10	6	39	27	25			
1	52	30	9	17	16	31	4	28			3	51	30	8	11	7	22	28	25			

A TABLE of HOUSES for the Latitude of 51 Degrees 32 Minutes, according to the Doctrine of *Ptolemy*, serving the City of *London*, &c.

☉ in ♀										☉ in ♂									
Time from noon.		10	11	12	Ascen		1	2	3	Time from noon.		10	11	12	Ascen		1	2	3
h	m	gr	gr	gr	gr	m	gr	gr	gr	h	m	gr	gr	gr	gr	m	gr	gr	gr
3	51	0	8	11	7	22	28	25	6	0	0	6	6	0	0	24	24	6	4
3	55	1	9	12	8	0	29	26	6	4	1	7	7	0	47	25	25	6	9
4	0	2	10	13	8	50	27	27	6	9	2	8	8	1	33	26	26	6	13
4	4	3	10	14	9	34	1	28	6	13	3	9	9	2	19	27	27	6	17
4	8	4	11	15	10	18	2	29	6	17	4	10	10	3	5	27	28	6	22
4	12	5	12	16	11	3	2	30	6	22	5	11	11	3	51	28	29	6	26
4	16	6	13	17	11	47	3	1	6	26	6	12	12	4	27	29	29	6	31
4	21	7	14	17	12	31	4	2	6	31	7	13	13	5	23	30	30	6	35
4	25	8	15	18	13	16	5	3	6	35	8	14	14	6	9	1	2	6	39
4	29	9	16	19	14	1	6	4	6	39	9	15	15	6	55	2	3	6	44
4	32	10	17	20	14	46	7	5	6	44	10	16	16	7	40	2	4	6	48
4	38	11	18	21	15	31	8	6	6	48	11	17	16	8	26	3	4	6	52
4	42	12	19	21	16	16	8	7	6	52	12	18	17	9	12	4	5	6	57
4	46	13	20	22	17	1	9	8	6	57	13	19	18	9	57	5	6	6	1
4	51	14	21	23	17	46	10	9	7	1	14	20	19	10	41	6	7	6	5
4	55	15	22	24	18	32	11	10	7	5	15	21	20	11	28	7	8	6	9
4	59	16	23	24	19	17	12	11	7	9	16	22	21	12	14	8	9	6	14
5	3	17	24	25	20	4	13	12	7	14	17	23	22	12	59	8	10	6	18
5	8	18	25	26	20	49	14	13	7	18	18	24	22	13	45	9	11	6	22
5	12	19	25	27	21	35	14	14	7	22	19	25	23	14	30	10	12	6	27
5	16	20	26	28	22	20	15	14	7	27	20	26	24	15	14	11	13	6	31
5	21	21	27	28	23	6	16	15	7	31	21	27	25	15	59	12	14	6	35
5	25	22	28	29	23	51	17	16	7	35	22	28	25	16	44	13	15	6	39
5	29	23	29	30	24	37	18	17	7	39	23	28	26	17	29	13	16	6	44
5	34	24	30	1	25	25	19	18	7	44	24	29	27	18	14	14	17	6	48
5	38	25	1	2	26	9	20	19	7	48	25	30	28	18	58	15	18	6	52
5	43	26	2	3	26	55	20	20	7	52	26	1	28	19	42	16	19	6	56
5	47	27	3	4	27	41	21	21	7	56	27	2	29	20	26	17	20	6	0
5	51	28	4	5	28	27	22	22	8	0	28	3	30	21	10	18	20	6	5
5	56	29	5	5	29	13	23	23	8	5	29	4	1	21	54	18	21	6	9
6	59	30	6	6	30	0	24	24	8	9	30	5	2	22	38	19	22	6	1

A TABLE of HOUSES for the Latitude of 51 Degrees 32 Minutes, according to the Doctrine of *Ptolemy*, serving the City of *London*, &c.

☉ in ♈										☉ in ♉									
Time from noon		Ascen									Time from noon		Ascen						
h	m	gr	gr	gr	gr	m	gr	gr		h	m	gr	gr	gr	gr	m	gr	gr	
8	9	0	5	2	22	38	19	22		10	8	0	2	26	13	3	13	20	
8	13	1	5	3	23	22	20	23		10	12	1	3	26	14	9	14	21	
8	17	2	6	3	24	3	21	24		10	16	2	4	27	14	49	15	22	
8	21	3	7	4	24	48	22	25		10	20	3	5	28	15	29	16	23	
8	25	4	8	5	25	32	23	26		10	24	4	5	29	16	9	16	24	
8	29	5	9	6	26	19	23	27		10	27	5	6	29	16	48	17	25	
8	34	6	10	7	26	58	24	28		10	31	6	7	30	17	28	18	26	
8	38	7	11	8	27	2	25	29		10	35	7	8	1	18	6	19	27	
8	42	8	12	8	28	3	26	30		10	39	8	9	2	18	48	20	28	
8	46	9	13	9	29	6	27	1		10	42	9	10	2	19	27	20	29	
8	50	10	14	10	29	48	27	2		10	46	10	11	3	20	6	21	30	
8	54	11	15	11	om	30	28	3		10	50	11	11	4	20	48	22	1	
8	58	12	16	12	1	13	29	4		10	54	12	12	4	21	26	23	2	
9	2	13	17	12	1	55	3	4		10	57	13	13	5	22	5	24	3	
9	6	14	18	13	2	36	1	5		11	1	14	14	6	22	45	24	4	
9	10	15	18	14	3	18	2	6		11	5	15	15	7	23	24	25	5	
9	14	16	19	15	4	0	2	7		11	9	16	16	7	24	4	26	6	
9	18	17	20	16	4	41	3	8		11	12	17	17	8	24	43	27	7	
9	22	18	21	16	5	21	4	9		11	16	18	17	9	25	23	28	8	
9	26	19	22	17	6	4	5	10		11	20	19	18	10	26	3	29	10	
9	30	20	23	18	6	45	5	11		11	23	20	19	10	26	41	30	11	
9	34	21	24	19	7	26	6	12		11	27	21	20	11	27	22	0	12	
9	38	22	25	19	8	6	7	13		11	31	22	21	12	28	1	1	13	
9	41	23	26	20	8	47	8	14		11	34	23	22	13	28	40	2	14	
9	45	24	27	21	9	28	9	15		11	38	24	23	13	29	20	3	15	
9	49	25	28	22	10	8	9	16		11	42	25	23	14	29	49	4	16	
9	53	26	28	23	10	58	10	17		11	45	26	24	15	0	39	5	17	
9	57	27	29	23	11	29	11	18		11	49	27	25	15	1	19	5	18	
10	1	28	29	24	12	9	12	19		11	53	28	26	16	2	2	6	19	
10	5	29	1	25	12	50	12	20		11	56	29	26	17	2	39	7	20	
10	8	30	2	26	13	30	13	20		12	0	30	27	17	3	19	8	21	

TABLE OF HOUSES.

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A TABLE of HOUSES for the Latitude of 51 Degree: 32 Minutes, according to the Doctrine of Ptolemy, serving the City of London, &c.

☉ in ♈									☉ in ♎								
Time from noon.		10	11	12	Ascen.				Time from noon.		10	11	12	Ascen.			
h	m	gr	gr	gr	gr	m	gr	gr	h	m	gr	gr	gr	gr	m	gr	gr
12	0	0	27	17	3	19	8	21	13	52	0	22	10	25	15	10	27
12	4	1	28	18	3	55	9	22	13	55	1	23	11	26	5	11	28
12	7	2	29	19	4	49	10	24	13	59	2	24	11	26	50	12	29
12	11	3	30	20	5	20	11	25	14	3	3	25	12	27	47	14	1
12	15	4	1	20	6	2	11	26	14	7	4	25	13	28	39	15	2
12	18	5	1	21	6	43	12	27	14	11	5	26	14	29	29	16	4
12	22	6	2	22	7	24	13	28	14	15	6	27	15	0	24	18	5
12	26	7	3	23	8	5	14	29	14	19	7	28	15	1	18	19	6
12	29	8	4	23	8	46	15	30	14	22	8	29	16	2	13	20	8
12	33	9	5	24	9	28	16	2	14	26	9	3	17	3	10	22	9
12	37	10	6	25	10	10	17	3	14	30	10	1	18	4	6	23	10
12	40	11	6	25	10	52	19	4	14	34	11	2	19	5	3	25	11
12	44	12	7	26	11	35	20	5	14	38	12	2	20	6	1	26	13
12	48	13	8	27	12	18	21	6	14	42	13	3	20	7	0	28	14
12	51	14	9	28	12	59	22	7	14	46	14	4	21	8	0	29	15
12	55	15	10	28	13	43	23	9	14	50	15	5	22	9	2	30	17
12	59	16	11	29	14	26	24	10	14	54	16	6	23	10	6	3	18
13	3	17	12	30	15	10	25	11	14	58	17	7	24	11	9	4	19
13	6	18	12	1	15	54	26	12	15	2	18	8	25	12	14	6	21
13	10	19	13	1	16	39	27	13	15	6	19	9	26	13	21	8	22
13	14	20	14	2	17	23	28	15	15	10	20	9	27	14	29	9	23
13	18	21	15	3	18	8	29	16	15	14	21	10	27	15	37	11	24
13	21	22	16	4	18	54	30	17	15	18	22	11	28	16	46	13	26
13	25	23	16	4	19	39	1	18	15	22	23	12	29	17	58	14	27
13	29	24	17	5	20	26	2	20	15	26	24	13	30	19	11	16	28
13	33	25	18	6	21	14	4	21	15	31	25	14	1	20	27	17	29
13	36	26	19	7	22	1	5	22	15	35	26	15	2	21	43	19	30
13	40	27	20	7	22	49	6	23	15	39	27	16	3	23	3	21	31
13	44	28	21	8	23	37	7	24	15	43	28	17	4	24	4	22	32
13	48	29	21	9	24	26	8	25	15	47	29	18	5	25	47	24	33
13	51	30	22	10	25	15	10	27	15	51	30	18	6	27	1	26	34

A TABLE of HOUSES for the Latitude of 51 Degree:
32 Minutes, according to the Doctrine of *Ptolemy*,
serving the City of *London*, &c.

☉ in ♏										☉ in ♏									
Time from noon	10	11	12	Ascen			1	2	3	Time from noon.	10	11	12	Ascen			1	2	3
	♏	♏	♏	♏	♏	♏	♏	♏	♏		♏	♏	♏	♏	♏	♏	♏	♏	♏
h	m	gr	gr	gr	gr	m	gr	gr	gr	h	m	gr	gr	gr	gr	m	gr	gr	gr
15	51	0	18	6	27	10	20	6		18	0	0	18	13	0	0	17	11	
15	55	1	19	7	28	27	28	7		18	4	1	20	14	2	7	19	13	
16	0	2	20	8	0	6	9	9		18	9	2	21	16	5	9	20	14	
16	4	3	21	9	1	32	1	10		18	13	3	22	17	7	55	22	15	
16	8	4	22	10	3	11	3	11		18	17	4	23	19	10	21	23	16	
16	12	5	23	11	4	48	5	12		18	23	5	24	20	13	2	25	17	
16	16	6	24	12	6	27	7	14		18	26	6	25	22	15	37	26	18	
16	21	7	25	13	8	8	9	15		18	30	7	26	23	18	7	28	19	
16	25	8	26	14	9	52	11	16		18	35	8	27	25	20	35	29	20	
16	29	9	27	16	11	40	12	17		18	39	9	29	7	23	0	31	21	
16	32	10	28	17	12	30	14	18		18	44	10	30	28	25	22	1	22	
16	38	11	29	18	15	20	16	20		18	48	11	1	31	28	43	2	23	
16	42	12	30	19	17	16	18	21		18	52	12	2	2	0	8	4	24	
16	46	13	1	20	19	15	20	22		18	57	13	3	3	2	16	5	25	
16	51	14	2	21	21	17	21	23		19	1	14	4	5	4	27	6	26	
16	55	15	3	22	23	20	22	25		19	5	15	6	7	6	33	8	27	
16	59	16	4	24	25	32	23	26		19	9	16	7	9	8	39	9	28	
17	4	17	5	25	27	44	24	27		19	14	17	8	10	10	43	10	29	
17	8	18	6	26	29	58	25	28		19	18	18	9	12	12	42	11	30	
17	11	19	7	27	2	17	8	29		19	22	19	10	14	14	40	12	1	
17	16	20	8	29	4	38	2	31		19	27	20	12	16	16	31	13	2	
17	20	21	9	30	7	0	3	1		19	31	21	13	18	18	20	15	3	
17	25	22	10	1	9	24	5	2		19	35	22	14	19	20	5	16	4	
17	30	23	11	3	11	53	7	3		19	39	23	15	21	21	52	17	5	
17	34	24	12	4	14	23	8	5		19	44	24	16	23	23	33	18	6	
17	38	25	13	5	16	59	10	6		19	48	25	18	25	25	13	19	7	
17	43	26	14	7	19	36	11	7		19	52	26	19	27	26	49	0	8	
17	47	27	15	8	22	5	13	8		19	56	27	20	28	28	22	21	9	
17	51	28	16	11	24	39	14	9		20	0	28	21	9	29	53	22	10	
17	56	29	17	12	27	20	16	10		20	5	29	23	12	31	23	23	11	
18	0	30	18	13	30	0	17	11		20	9	30	24	2	2	51	24	12	

A TABLE of HOUSES for the Latitude of 51 Degrees 32 Minutes, according to the Doctrine of *Ptolemy*, serving the City of *London*, &c.

☉ in ♈										☉ in ♉									
Time				Ascen						Time				Ascen					
from	10	11	2	1	2	3				from	10	11	12	1	2	3			
noon.	☿	♈	♈	♈	♈	♈				noon.	♈	♈	♈	♈	♈	♈			
h	m	gr	gr	gr	gr	m	gr	gr	gr	h	m	gr	gr	gr	m	gr	gr	gr	gr
20	9	0	24	4	2	50	24	12		22	8	0	3	20	4	45	20	8	
20	13	1	25	6	4	14	25	12		22	12	1	4	21	5	35	21	8	
20	17	2	27	7	5	37	6	13		22	16	2	6	23	6	23	22	9	
20	21	3	28	9	6	58	27	14		22	20	3	7	24	7	12	23	10	
20	25	4	29	11	8	17	28	15		22	24	4	8	25	8	0	23	11	
20	29	5	31	13	9	33	29	16		22	27	5	9	26	8	48	24	12	
20	34	6	2	14	10	49	30	17		22	31	6	10	28	9	35	25	13	
20	38	7	3	16	12	13	1	18		22	35	7	12	29	10	22	26	14	
20	42	8	4	18	13	14	2	19		22	39	8	13	31	11	7	26	14	
20	46	9	6	19	14	24	3	0		22	42	9	14	1	11	52	27	15	
20	50	10	7	21	15	32	3	21		22	46	10	15	2	12	37	28	16	
20	54	11	8	23	16	40	4	21		22	50	11	17	3	13	22	29	17	
20	58	12	9	24	17	46	5	22		22	54	12	18	4	14	7	29	18	
21	2	13	11	26	8	55	6	23		22	57	13	19	5	14	54	30	19	
21	6	14	12	28	9	56	7	24		23	1	14	20	6	15	35	1	19	
21	10	15	13	29	20	58	8	25		23	5	15	21	7	16	17	2	20	
21	14	16	15	8	22	0	9	26		23	9	16	23	8	17	1	2	21	
21	18	17	16	2	23	0	10	27		23	12	17	24	9	17	44	3	22	
21	22	18	17	4	23	59	10	28		23	16	18	25	10	18	26	4	23	
21	26	19	19	5	24	58	11	28		23	20	19	26	11	19	9	5	24	
21	30	20	20	7	25	55	12	29		23	23	20	27	12	19	52	5	24	
21	34	21	22	8	26	51	13	30		23	27	21	29	13	20	23	6	25	
21	38	22	23	10	27	47	14	1		23	31	22	8	14	21	14	7	26	
21	41	23	24	11	28	41	15	2		23	34	23	1	15	21	56	7	27	
21	45	24	25	13	19	36	15	3		23	38	24	2	16	22	37	8	28	
21	49	25	26	14	0	31	16	4		23	42	25	3	17	23	18	9	28	
21	53	26	27	15	1	22	17	4		23	45	26	4	18	23	59	9	29	
21	57	27	28	16	2	14	18	5		23	49	27	5	19	24	39	10	30	
22	1	28	29	18	3	4	19	6		23	53	28	7	20	25	21	11	1	
22	5	29	2	19	3	56	19	7		23	56	29	8	21	26	2	12	2	
22	8	30	3	20	4	45	20	8		24	0	30	9	22	26	42	12	3	

*Of the ECLIPSES, and other PHOENOMENA,
in the Year 1789.*

AT the latter end of the year 1788, or the beginning of the year 1789, a Comet is expected to appear; concerning which nothing certain can be determined at present, for want of sufficient observations of the antients, and not correct enough to be relied upon. This too might in all probability be owing to their false conceptions of the real nature of Comets, which they looked upon as prodigies, and blazing meteors, lighted up in the heavens, as forerunners of some notable misfortunes, and strange mutations in this our sublunary globe; therefore in ancient history, upon the destruction of empires, or the depopulation of cities by plague, pestilence, or famine, we generally find an account of a blazing Star with a large fiery Tail, which was seen in the heavens at or before that time, terrifying every beholder for several nights successively. The diligence however of later Astronomers has established beyond a doubt that they are opaque, spherical, and solid bodies, and perform their periodical revolutions about the Sun in orbits vastly elliptical, which have the Sun in one of their *foci*. They differ from the Planets in this: They move in various directions, some the same way with the Planets, others in contrary directions. And while the planetary motions are confined within the Zodiac, their orbits admit of any inclination whatever; and the excentricity of them is so very great, that some of them perform the greatest part of their motion nearly in right lines, tending in their approach to the Sun almost directly towards it, and after leaving it flying off in almost a right line, till out of the ken of man, and appear as if they were hastening away to the fixed stars. Although at present, for want of sufficient observations, not many things can with certainty be said upon either their number, or their periodical returns, yet the learned and Rev. Mr. Rowning has remarked thus: It seems probable that the Comet which appeared in the year 1682, was the same which was seen before in the year 1607, and the year 1531, and has a circuit of about 151 years. And the great Comet which appeared in the year 1680, was the same which was seen in the time of K. Henry I. in the year 1106, in

531, and in the 44th year before Christ, in which Julius Cæsar was murdered. As to the Comet expected, I shall only add, that as the Comet of 1531, 1607, and 1682, returned in 1759, there is no doubt but all others will return at their proper periods; and the Comet of 1532 and 1661, being thought to be the same, its return is expected at the latter end of 1788, or before April 27, 1789.

As the mention of a Comet seldom comes under the notice of an Almanack, whose particular business is only to predict and draw inferences from the phenomena which shall happen in the year for which they were calculated, it may not be amiss to enlarge a little more on this subject:

The ancients (as we have before observed) being entirely ignorant of their nature, looked upon them as meteors kindled in the air, and portending some extraordinary event. As a proof of this a passage from Homer is sufficient.

As the red Comet from *Saturnius* sent,
To fright the nations with a dire portent,
(A fatal sign to armies on the plain,
Or trembling sailors on the wat'ry main)
With sweeping glories glides along in air,
And shakes the sparkles from his blazing hair.

The moderns however found that they were real bodies, moving in very elliptical orbits, and in various directions and different periods, being at some times extremely near the Sun, and at others immensely distant, by reason of which they are sometimes much hotter than Mercury, and at other times much colder than Saturn.

The Comet in 1680 came so near the sun, that it was not a sixth part of the Sun's diameter distant from his surface, and his heat then was two thousand times hotter than red-hot iron; from thence it took its course from the Sun to the distance of above eleven thousand millions of miles, which is at least fourteen times further than the orbit of Saturn. The light and heat then of that Comet is therefore near two hundred times less than at Saturn, and above seventeen thousand times less than with us; and when it was nearest the Sun, the light and heat thereof was no less than twenty-eight thousand times greater than in our torrid zone.

What chiefly attracts the notice of the generality of people is the Tail of a Comet.—The Tails of Comets appear largest and most splendid immediately after their return from the Sun, because they then emit the most vapour. Agreeable likewise to the nature of vapour and smoke, the tail of a Comet lies always towards those parts which the Comet's body leaves in its descent. We may farther add, that as vapours, they rise the more as they expand; so the tails of Comets appear broader on their upper part than near the head. Another proof that they consist of a fine pellucid vapour is, that the fixed stars are often seen thro' the tails of comets. Lastly, These tails are exceeding long, some having been computed to be not less than eighteen millions of miles in length.

The conjectures of philosophers upon their uses are various. Certain it is that God made nothing in vain, but in vain may we conjecture notwithstanding.

Some of the first rank in the philosophical world have imagined, that by the rarefaction, and spreading of the vapours of the tails of Comets, they supply the planets with moisture, which they suppose by vegetation and putrefaction, &c. continually decreases.

Others suppose, that Comets, in their several revolutions, approach nearer and nearer to the Sun, till at last dropping into it, they supply that great luminary with fresh fuel.

Lastly, It appears to be the general opinion that they are instruments appointed by the Almighty to put a period to the planetary world, whenever his divine will shall so determine; which may be done either by involving the globe of the Planets in their passage towards the Sun in their atmosphere of water, and thereby drowning them, as it was with this earth in the days of Noah; or else, by advancing a little too near in their return from the Sun: This indeed was the case of the Comet in the year 1680, when the Comet came so near the orbit of the Earth, that had our globe then been in that part of its orbit, we must acknowledge that "*The Globe itself, with all which it inhabited, had dissolved, and, like the baseless fabric of a vision, left not a wreck behind.*" But I speak only of what is possible, not of what is probable.

Of

Of the ECLIPSES which will happen in the Year 1789.

WITHIN the compass of the present year there will be four Eclipses, two of the Sun and two of the Moon; but only one of them will be visible to the inhabitants of this isle. These will happen in the following order:

The first will be a partial, but to us invisible Eclipse of the Moon, and will happen on May 9, as follows:

Beginning	-	8 h. 38 min.	} in the morning.
Middle	-	9 h. 31 min.	
End	-	10 h. 24 min.	
Duration	-	1 h. 46 min.	

Digits eclipsed $2^{\circ} 54'$ on the Moon's northern limb.

But although none of this Eclipse will be visible to Europeans, in all the western parts of both North and South America it will be visible. The fore part of this Eclipse may be seen in East and West Florida, the Havannah and Jamaica; but the whole of this Eclipse will be seen at the Sandwich and Friendly Islands, discovered by that celebrated circumnavigator Capt. Cook; as also in New Zealand, new Holland, the Philippine Isles, Japan, and Yedso.

The second Eclipse will be a solar defect, on Sunday, the 24th of May; the conjunction is at 20 minutes and a half past 10 at night, therefore will of consequence be invisible to the inhabitants of Great Britain. It will however be a central Eclipse on the meridian at 18 minutes past 10, in Longitude $154^{\circ} 29'$ West, and Latitude $11^{\circ} 14'$ South of Greenwich Observatory.

The third is a partial and visible Eclipse of the Moon, and if the air prove serene and favourable, may be seen by the inhabitants of this isle. This Eclipse will happen as follows:



Beginning	Nov. 2, at 11 h. 27 m. night.
Middle	- Nov. 3, at 0 h. 32 m. morn.
End	- Nov. 3, at 1 h. 36 m. morn.
Duration	- - - 2 h. 9 m.

Digits eclipsed 3 deg. 40 m. on the Moon's southern limb. See the type in the margin.

This Eclipse will be visible to all the inhabitants and states in Europe and Africa, together with the western parts of Asia, and the eastern parts of America. But in Siam, China,

China, Chinese Tartary, &c. in the eastern parts of Asia the fore part only will be visible.

The fourth and last is an invisible Eclipse of the Sun, which will happen on Tuesday, Nov. 17, at 29 minutes past 3 in the morning.

This Eclipse, although invisible to all Europe, will be visible in China, and the eastern parts of Great Tartary in Asia; likewise to the Island of Japan and Yedso. The Sun moreover will be centrally eclipsed on the meridian at 22 minutes past 3, in Long. $129^{\circ} 31'$ East, and Lat. $14^{\circ} 45'$ North of Greenwich Observatory.

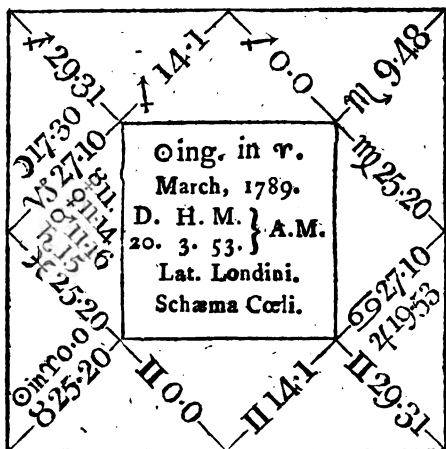
Thus I conclude my Astronomical Observations upon the Eclipses of the present year; as to astrological remarks, as there is but one visible, and that to us a partial one, and in which all our neighbours are as much concerned as we, I think them at this time unnecessary, and hasten to the Seasons.

OF THE WINTER QUARTER.

THIS Quarter commences the 21st day of Dec. 1788, at 2h. 14m. mane, when the bright Charioteer of Heaven first touches upon the cold, cardinal, and melancholy sign of Capricorn, the house of η and exaltation of δ , and the triplicity of φ and \mathcal{D} , and whose angel, according to the Arabian Astrologers, is *Hunuel*. Now has the Sun reached his utmost southern limits, short are his visits, and then, when veiled in a wintry cloud, even day itself seems benighted. This season is well pictured by *Horace. Lib. I. Ode 9.*

- “ Behold yon mountain’s hoary height,
- “ Made higher with new mounts of snow;
- “ Again behold the Winter’s weight
- “ Oppress the lab’ring woods below;
- “ And streams with icy fetters bound,
- “ Benumb’d, and cramp’d to solid ground.”

I imagine there will be much consultation in the closets of princes; and the senators of every nation are contriving work for the more active part of the year. It is ushered in with a disagreeable aspect, which is followed by no less than three more, all as it were in the entrance of the year of a malign nature. It is certainly a very active ingress, and apparently inclined to acts of violence.



OF THE SPRING QUARTER.

THIS Quarter begins on March 20, when the Sun enters upon the first scruple of the masculine, diurnal, equinoctial, and cardinal sign of Aries, the day house of ♂, the exaltation of the ☉, and the triplicity of ☉ and ♈, whose angel is said by ancient writers to be *Muschidiel*.

Sol, now mounting up the northern hemisphere maketh equal day and night, introducing the welcome Spring.

We have, according to our usual custom, given a Scheme of the Heavens as they appear to the eye of the astrologer at Sol's first ingress. We find the quarter is ushered in with no less than five Conjunctions and two trines, *viz.* ♂♂♀, ♂♂♂, ♂♀♂, ♂♂♀, ♂♂♂, Δ♈♀, Δ♈♂, all favourable Aspects. You moreover perceive that in the above scheme sagittary is upon the Medium Cœli, and 27° 10' of Capricorn is on the ascendant; the Planets, excepting the Moon, are all under the Earth. We may expect much negotiation. We would do well to hope and endeavour that all shall be of the pacific kind; we at the same time shall do well to be upon our guard, that we be not deceived by the pretensions of false friends. Fraud and guile will keep footing so long as the world endures; for as many ill properties as the devil hath, this may

may be said in his behalf, that he is not an idle devil; may the strictest bond of unity keep him from sowing dissension in the councils of the British nation; so may we yet be a happy nation. Let us be virtuous, and God, even our own God, shall give us his blessing.

THE SUMMER QUARTER.

THIS Quarter takes its beginning on the 21st day of June, when the Sun enters upon the fruitful, solstitial, cardinal, and most northern sign in the Zodiac, the sign Cancer; the house of the ♄, the exaltation of ♈, and the triplicity of ♂, ♀, and ♄, whose angel, according to former writers, is said to be *Muriel*, making the longest day and the shortest night in this our hemisphere. Much hurry and confusion appear to be in many parts of the world, and they are the safest who have the least to lose. Some unexpected news from different parts. Rome still holds up her head, but seems to lay aside her scourge. There is an event to which all things are operating, but the manner of bringing it about is hid from human ken. I therefore hasten to

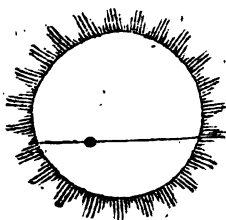
THE AUTUMNAL QUARTER.

THIS Quarter commences upon the Sun's entering upon the equinoctial, diurnal, western, and cardinal sign Libra, whose angel is said to be *Zuriel*. This will happen this year on the 22d day of September, at 3h. 8m. P. M. I here must close my account of this present year, with observing that, in my opinion, it will be productive of great mutations; these however will all operate to one great end, but growing years will of this give a further insight.

I cannot conclude without informing the curious, that on the 5th day of November there will be a remarkable transit of the Planet Mercury over the Sun's disc. This will be visible in England till sun set, and the latter part will be seen at the Cape Verd and Canary Isles, the Azores, Iceland, Greenland, and to the North and North-west, as far as Baffin's Bay.

The following calculation is from accurate tables:

Beginning



Beginning 1h 10m P. M. Mercuries

Lat. $9^{\circ} 20''$ South.

Ecliptic Conjunction 3h 30m. $8' 16''$

Mid. of the Transit 3 37 7' 17"

Sun sets - - - 4 39

End - - - 6 4 5' 15"

I conclude my predictions for this year with praying the Divine Being to avert all heavy calamities from this our isle, and whatever disturbances may be abroad, may we be blessed with peace and unity at home, and approve ourselves the loyal subjects of the best of Kings, whom God defend and preserve. Amen.

IT having, in this age of division in sentiments relating to religious worship, been enquired what was the doctrine of the primitive Christians, with respect to faith and duty, as taught in the sacred Scriptures? we shall here give the following abridgement of the same in the words of *Pollio*, a Christian martyr, who died for the truth of his holy profession, A. D. 304.

This *Pollio*, being a reader in the church of Cibales in Pannonia, was accused before Governor *Probus* of having derided the gods of wood and stone which the Heathens adored.—This man, being brought before the Judge, manfully confessed himself to be a Christian, and one of those who, in spite of tortures, would persist in his fidelity to the Eternal King; and in obedience to the divine commands of the word of truth, as given by his Lord and Saviour Jesus Christ.

Probus upon this demanded to know what those commands were? To which *Pollio* thus replied :

“ These commands (said he) are they which teach us that there is but one God in Heaven. That images made of wood and stone cannot be called gods, nor be any way propitious to men. By these commands we must correct our faults by repentance, and persevere inviolably in the good we have embraced. That virgins, who maintain their purity, are advanced to a high rank: That married women ought to preserve their conjugal chastity, and attend to the education of their children: That masters ought

ought to rule over their servants with mildness and good nature : That servants ought to acquit themselves of their duty rather from motives of love than fear : That we ought to be obedient to the civil power in every thing that is just : That we ought to reverence our parents, love our friends, and forgive our enemies : That we must be tender and affectionate to all our fellow creatures, humane to strangers, charitable to the poor, and live in peace with all men : That we must do no injury to any one, and suffer with patience the wrongs which others do to us : That we must bestow our goods with liberality, and not covet those of others : And that he shall live eternally who, in defence of his faith, despises a momentary death, which (says he) is the utmost punishment you can inflict."

Notwithstanding (says my author) this noble confession, replete as it is with pure and heavenly sentiments, the Governor *Probus* ordered *Pollio* to be chained to a stake and burned to death.

Such was the faith, and such the character, of the Christians in former ages ; and that it was a just one will appear from the sentiments of one of the greatest philosophers and wisest Emperors that ever governed Rome, wherein you will see a vindication of the Christians pronounced from the mouth of a Heathen ; this was a letter written in the year of Christ 152, by the Emperor Antoninus to the states in Asia, who had accused the Christians of being the cause of several earthquakes which had happened in that part of the globe.

In this he advised the Governors to take great care, lest in punishing the Christians they should make them more obstinate than before, instead of changing their opinions ; since their religion taught them to suffer with pleasure and resignation for the sake of their God. As for the earthquakes which had happened, he told them, that they themselves were always discouraged, and sunk under such misfortunes ; whereas the Christians never discovered more cheerfulness and confidence than upon such occasions. He concluded with telling them, that he would not have the Christians injured ; for although they did not worship the gods of the Empire, yet they had a God of their own, and that they were a peaceable and inoffensive people.

OLD ~~POOR~~ ROBIN. An ALMANACK.

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(According to the most modern Mode of Composition)

ON

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Part in Verse;
Part Narrative,

|| Part Contemplative;
|| Part Serious,
|| Part Comic;

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setting the Press, the Duty for Stamps, and the immense Trouble
of Composition; as he gives the Stitching gratis.

A Chronological Account of remarkable Occurrences.

	THE Creation of the World	Years.	5893
	The general Deluge, or <i>Noah's Flood</i>	-	4140
	The Birth of <i>Abraham</i>	-	3788
	The Foundation of <i>Solomon's Temple</i>	-	2804
	The Babylonish Captivity	-	2496
	The Birth of our blessed Lord and Saviour <i>Jesus Christ</i>	-	1788
	His Passion, glorious Resurrection	-	1756
	The beginning of the Ten Persecutions by <i>Nero</i>	-	1717
	The Tower of <i>London</i> built	-	1220
	<i>Cambridge</i> made an University	-	1144
	<i>Oxford</i> made an University	-	918
	<i>William Duke of Normandy</i> conquered <i>England</i>	-	723
	The Invention of Guns	-	411
	The Art of Printing first Invented at <i>Harlem</i>	-	359
	A great Plague in <i>London</i> , whereof died 30,578,	-	187
	The horrid Gunpowder Treason	-	184
	The Holy Bible new translated	-	182
	Plague in <i>Bandon</i> , of which, and other Diseases died 54,266	164	
	<i>New England</i> planted	-	159
	King <i>Charles I.</i> beheaded	-	141
	King <i>Charles II.</i> restored	-	129
	Another Plague in <i>London</i> , whereof, &c. died near 100,000	124	
	13,200 Houses burnt in <i>London</i>	-	123
	A great Comet appeared in <i>December</i> and <i>January</i>	-	109
	The great 13 Weeks Frost	-	105
	King <i>William III.</i> and Queen <i>Mary</i> crowned, <i>April 11</i>	-	100
	<i>England</i> and <i>Scotland</i> united	-	82
	<i>St. Paul's</i> in <i>London</i> finished	-	82
	Queen <i>Anne</i> died <i>August 1</i> ; and King <i>George I.</i> began	-	79
	<i>Protestant</i> Rebellion	-	74
	King <i>George I.</i> died <i>June 11</i> ; and King <i>George II.</i> proclaimed <i>16</i>	62	
	A splendid Comet, seen from <i>Dec. 23</i> to <i>Feb. 20</i>	-	46
	A Rebellion, when the Rebels came so far as <i>Derby</i>	-	44
	The Date and Calendar altered	-	37
	The Militia Act passed	-	31
	King <i>George II.</i> died <i>Oct. 25</i> ; and King <i>George III.</i> began	-	29
	King <i>George III.</i> and Queen <i>Charlotte</i> crowned <i>Sept. 22</i>	29	
	Peace with <i>France</i> and <i>Spain</i>	-	25
	The <i>Swedes</i> forced to resign their Liberties to the King	-	39
	War commenced against <i>North America</i>	-	14
	The <i>Americans</i> declare themselves Independent States	-	13
	The <i>French</i> signed the first Treaty with the <i>American States</i>	-	12
	War against <i>France</i> commenced	-	12
	War was begun against <i>Spain</i>	-	10
	War against <i>Holland</i> commenced	-	9
	A general Peace	-	6

P R E F A C E.

I Begin my Preface this Year with my humble Acknowledgements to the Public for the many kind Letters which I have received from all Quarters; their Preference of my Lucubrations to those of other Presses under the same Signature claims my warmest Thanks; with a sincere Assurance that I shall not do as the others yearly practise, viz. hunt ancient Almanacks for dull Rhymes and stale Jest; but continue as I have hitherto done with something new.—*Nam semper sapit.*—which is, according to my Grandson Jacob's Translation, "No Man is wise at all Times," or, if you rather chuse my Wife's Translation, it is thus:

Husband you're often a Fool.

Take which of these you please.—All I have to say is, that where my Head fails, my Heart is good; and when a Man has done his best, as there is no Degree of Comparison beyond the Superlative, he can do no more. The Calender Part shall be made to suit the Public in every Line of Life; for which Reason the Tide Table is continued for the Use of numerous Friends on the Maritime Parts of this Country, together with the Table of the Moon's Southing, with what other Tables either the Author or his kind Customers shall from Time to Time judge necessary towards completing a Work of this Kind; I am now perusing the various Letters Congratulatory and Odes Epistolary which I have received from various Parts of his Majesty's Dominions.—And here I cannot avoid my humble Acknowledgement for the truly sublime Ode in Greek, together with the two elegant Latin ones upon this Performance, and the delicate Manner in which it is conducted. But as these must suffer infinitely by a Translation, and to give them in the Original would be of little Avail to the major Part of my Readers, I omit a Recital; and proud as I am of them, like a good Member of the Community and Fellow-Citizen of the World, I sacrifice my Vanity to the public Utility. Another Epistle now before me advises me not to deal too much in the Sublime.—I thank the Gentleman for his kind Caution, and hope, when he peruses my former Lucubrations, he will have no Reason to doubt but that I shall religiously adhere to it.

Here is another Letter though not relative to the Matter in Hand yet as it may be instructive to some, and amusing to others, for the public Good I give it verbatim as follows :

S I R

I have many Grievances to relate, but as I am not at all loquacious, and finding you to be a Child of Taciturnity, and one who loves to say the most in the smallest Compass; I will give you it all in three Words.—*I am married.*

Now I seek not to you for Redress; well knowing that nothing but the cold Hand of Death can give it.—But between you and me—I don't want to die—but to live quietly—My Wife wants neither the one nor the other—and what would be a Heaven of a Life to me appears a Hell of a one to her.—In truth we are opposite in all Things.—I approve of the plain Card—she delights in flaunting Finery.—I love Silence—the Noise—I love to think without speaking—she to talk without thinking at all.—When I deliver a Sentiment, you would think that the Heavens had shut up all the Winds, except the Soft Whisper of the gentle Zephyr; so small and so sweet is my Voice.—When she speaks you would think that Hell had got a Holiday, and all its Imps were yelling through a Speaking Trumpet—so loud and so shrill is her's.—'Tis true she has bless'd me with two fine Girls; but then I am curs'd with the Reflection that she is to have the training of them; and in the vocal Way I must needs confess that they take very much after their Mother.—You will perhaps retort here in Manner following—Why could I not perceive these Things before the Nuptial Tie?—Sir Robert this is the Cause of my Writing—I wish only to stand forth as a Warning to the Unwary—You are a married Man yourself, and therefore can best judge of what follows.

Women (I do aver from my own Experience) are not the same Creatures after Wedlock as they were before.—I thought my Wife before I wed her the most angelical Being in the World:—And she may possibly indeed have something Angelical about her now—I dare not deny it, as I have heard some young Officers of her Acquaintance affirm it.—But give leave to say this to my Sorrow:—Where she has a Deachm the Angel she has a Pound of the Devil in her.—I say no more Fear she should hear of it.—*I am married.*

Yours HENRY HENRICK'S.

P. S.

P. S. If the following Lines which I wrote not without Occasion be acceptable; they are heartily at your Service.

When Balaam rode his humble Ass,
And gave it many a bitter stroke,
Because it onward dar'd not pass;
How prettily the Creature spoke.

'Twas well he did not ride his Wife,
She'd ne'er have spoke in Words so civil;
But flung and bounc'd, and on my Life
She'd kick'd Old Balaam to the Devil.

My next Piece which I mean to exhibit to Publick View, is not an Original, but a Copy of it sent me by a Particular Friend.—Now, if you please to examine my Preface to this Species of Performance in the Year 1787, you will find a very curious Letter from a Mountebank Doctor to a Methodist Preacher, wherein he proposed an advantageous Coalition between them, with several curious Remarks, which (to use the Language of the Law) may there be seen, Reference thereto being had.—The Truth is (and as it is Truth it needs neither Logic nor Rhetoric to defend it) they had a Meeting; this Meeting produc'd Conversation, each Party back'd his Opinion with Argumentation, and as long as they spoke by Rotation, the last Speaker had always the better of it; but upon a fair Examination of the Pros and Cons it appeared that neither Side got the Victory, and therefore as is usual in such Cases, both Parties sung *Te Deum*.—At the next Conference they were not so regular in their Attacks, but occasionally would either of them when they found themselves too closely attacked, fly off (as the Geometricians call it) in a Tangent from their Argument, and where as Navigators term it the Larboard failed them, they flew directly to the Starboard.—But at last—*Astra regunt omnia*, say the Ancients; and I am very fond of Antiquity; which made me at my last Marriage chuse a Woman Seven Years older than myself.—The Aggregate or Sum total (as the Arithmeticians call it) is this—While Hurliothrumbo was taking his last fire, the Parson acknowledged that all his Ammunition was exhausted.—And in this Expression I hope you will allow that I not only profess the Arts and Sciences in civil Life, but that I likewise understand the Military.—The Conclusion of the Debate was that while Hurliothrumbo was

turned from his former Profession to a Methodist Preacher, he converted the other from the Error of his ways to be a Quack Doctor.—They each instructed the other in their new Occupations; and with Letters of Recommendation on each Side they parted upon the most amiable Terms.—I have no further to say in order to elucidate this Matter at present.—But if the Society of Antiquarians should want some further knowledge of the Affair to transmit to future Ages, let them give me a line Post-paid, and upon my Soul I will oblige them to the utmost; all I have to say further is, that Mr. Merriman would take his Chance with his Old Master in his new line of Business, and that the following is an Exact Copy of Hurlothrumbo's Letter after he had been admitted into the Sacred Function by taking an Oath or two before a Set of Country Justices.

My Dear Friend

Your kind Letters of Recommendation gain'd me a graceful Reception among the Saints.—You know the Necessity of having some good Hummers in every Class, without which even the Gifted themselves would often want that lifting up of the Soul which we so strongly contend for.—My good Friend Merriman by close Attendance on the Ordinances, added to a diligent Study of *Swift's mechanical Operations on the Spirit*, has so far attained that necessary Grace, that to my unspeakable Satisfaction he is already become the Head Hummer in the Congregation.—I have the Consolation to find a continual Scene of Success attending my diligent and pious Labours; having this very Day prayed one Saint out of a Piece of Beef; and preached another out of a Pork pye, while my Dear Fellow Labourer Mr. Merriman sung an Old Woman as many Hymns as came to two Pounds of Sausages: so that I may truly say as good Dr. Whitfield does in his Journal, "This has been a Day of fat Things."—To proceed.—In my first Preachment, I thought proper to store my Mind with Things drawn from my former Practice.—Accordingly I held forth Salvation Salve for sore wounded Sinners, and comfortable Juleps for the Poor in Spirit; a Divine Bolus for the broken Hearted, an Electuary of Grace to Salvation Seekers, and a Hellfire Blister for the proud Pharisee. This with a Detail of the innumerable Cures that had been performed upon the Unsanctified, by my Spiritual and Soul searching Physic, lasted me a full Hour; during which Time my good Friend Merriman gave his Hums so properly, and was followed by the other Hummers so loud and so orderly; that the whole Assembly declared themselves edified; I received the Congratulations of the Brethren who

who all desired me to tarry there, and abide with them for some Time; to which I graciously complied. They wished me to take Care of my earthly Tabernacle, and take immediately some of the good Things of this Life to refresh my exhausted Spirits after so great a Fatigue.—But of this I took no Notice; only observing that I was ready and willing to spend and be spent at all Times.—Upon hearing of this, one of the Sisterhood took me to her House.—My next Discourse was upon Regeneration or the New Birth; not as it is spoken of by the Gownmen of the established Church; but as it is preached up by the Gifted of our Order. And here at one of my most pathetic Speeches, My good Friend Merriman clapping his Hands upon his Belly, and writhing his Body, pulled such an ugly Face, that a poor big bellied Woman fell immediately into Labour, and was delivered of a Male Child before I was delivered of my Discourse. Of this Accident I made a good Advantage, by telling my Audience, at my next holding forth, that the Child was regenerated in the Womb: this raised her a handsome Collection; of which at my first Visit I gave her as much as I could spare, and comforted her at the same time by telling her, that this Child was born a second Time before she was born the first; that I was the Spiritual Father of this Babe, and I make no Doubt but I shall be the natural Father of the next. My good Friend Merriman concluded my last Preachment with a Hymn of his own making, to the tune of "*King Arthur had a Pudding made, and he stuffed it full of Plumbs.*" and truly.

Never a Hymn did go off better,

So with this I conclude my Letter.

See Mr. Merriman's Hymn over the Leaf.

JANUARY hath xxxi Days.

M. Decl.
D. South.

First Quarter 4 }
 Full Moon 11 } Day at { 4 Hours, 24 M. Aft.
 Last Quarter 18 } { 5 — 56 M. Aft.
 New Moon 26 } { 8 — 39 M. Morn.
 { 6 — 21 M. Morn.

☉ enters = 19 Day at 38 Min. past Noon

122° 57'
 1622 24
 11 21 41
 16 20 47
 21 19 44
 26 13 31

1	21	T	Circumcision.	
2	22	F	Epiphany.	Mr. MERRIMAN'S
3	23	S	Triumph of the Cross.	HYMN.
4	24	D	2 Sun. aft. Chr.	Now let us make the Echo ring
5	25	M	Old Christ. Day	With Voices loud and Rout;
6	26	T	Epiphany.	<i>Twelfth Day</i>
7	27	W		Myanna Hymn you now shall sing,
8	28	T	Lucian.	And I will give it out.
9	29	F		
10	30	S		So now my dearest Friends, I trust
11	31	D	1 S. aft. Epiph.	You'll raise your Voices high,
12	1	M	Plow Monday	As if you meant to raise the Grind
13	2	T	Hilary	<i>Camb. Term beg.</i>
14	3	W	Oxford T. beg.	Of good Salvation Pys.
15	4	T		
16	5	F		And 'gainst our solid heavenly Food
17	6	S	O. twelfth Day.	Let not th' ungodly splutter;
18	7	D	2 S. aft. Epiph.	<i>Q. Char. b. d. kept</i> <i>Prisca.</i>
19	8	M	[of St. Paul]	Our doctrine shall be sweet and good,
20	9	T	Fabian	As Pancakes fry'd in Butter.
21	10	W	Agnes	
22	11	T	Vincent.	Oh trust not to the Scarlet Whore,
23	12	F	Hilary T. beg.	For Popery's Perdition;
24	13	S		Sad Lies all Sugar-scandled o'er
25	14	D	3 Sun. aft. Epiph.	With Treacle of Tradition.
26	15	M		<i>Convers. St. Paul</i>
27	16	T	Day lt. ends at	<i>Pr. Aug. Fred. b.</i>
28	17	W	6h. 23 M. After.	Nor of the Gownmen Matter make,
29	18	T		They differ from us widely;
30	19	F	K. Cha. I. Mart.	If they in writing Pains do take,
31	20	S		They preachin' o'er us idly.

Observations in JANUARY.

M Clock
D bef. O

Hark the hollow Winds do roar,
Pile the Fire and bar the Door;
And while the Elements do quarrel
Be their's the Battle, our's the Barrel.

2 4 23
6 6 38
11 8 41
16 10 28
21 11 59
26 13 10

M, D, O, D
D, ri. & f. ri. & f. age

1	9	a	36	viii	iii	6	The Lines	In our last Discourse we left
2	10	4	1	56	7	7	in this	Syntax going to treat upon a Sub-
3	11	46	3	57	8	8	write thro'	ject which, I myself, should have
4	Morn	2	58	9	9	9	evil	been right glad to have had logi-
5	0	54	2	58	10	10	Custom, and	cally cleared up.
6	2	4	1	59	11	11	Custom is	If you will give yourselves the
7	3	14	vii	19	12	12	the Devil.	Trouble to look into my serious
8	4	25	59	1	13	13		Observations for September last,
9	5	30	58	2	14	14	Ned Baley.	you will find that Mrs. Griffin
10	6	26	57	3	15	15	Jack Bon-	put the following Query, viz.
11	Drises	56	4	16	16	16	fer.	Whether Souls, when departed
12	5	42	55	5	17	17		from the Body, would know one
13	7	8	54	6	18	18		another in a separate State of Ex-
14	8	31	52	8	19	19	And so as	istence? Now, really, Sir or Madam,
15	9	53	51	9	20	20	this is not	for, although your Worship wears
16	11	13	50	10	21	21	my Plan	Breeches, and your Ladyship Pet-
17	Morn	49	11	22	22	22	I take in Fu-	tcoats, yet it is you know im-
18	0	30	47	13	23	23	ture where I	possible for me at perhaps a hun-
19	1	45	46	14	24	24	can.	dred Miles Distance to tell which
20	2	55	45	15	25	25		Sex it is that at this very identical
21	3	58	43	17	26	26	Sue Trim	Moment, viz. September the 14th
22	4	52	42	18	27	27	Jo. But	at 27 Minutes past Five, is reading
23	5	38	40	20	28	28	Ned Sharp	my Lucubrations.
24	6	37	39	21	29	29		But this has been a Matter
25	6	48	37	23	30	30	The Names	which has cost me many a serious
26	D sets	36	24	24	31	31	I write I	Argument upon my Midnight
27	6	14	34	26	2	2	know no	Pillow; when my dear Lady has
28	7	17	33	27	3	3	more	closed her Legs, and gone to sleep.
29	8	21	31	29	4	4	Than you	On the one Side I have reasoned
30	9	25	29	31	5	5	was what	thus; I have an immortal Soul, I
31	10	32	28	32	6	6	before	am certain of it. Every Thing else

FEBRUARY hath xxviii Days.				M	Dec.
				D	South.
First Quarter	3	} Day at {	9 Hours, 25 M. Morn.	1	16 53
Full Moon	10		4 — 8 M. Morn.	6	15 22
Last Quarter	16		10 — 1 M. Aftern.	11	13 46
New Moon	25		1 — 14 M. Morn.	16	12 3
☉ enters ♋ 18 Day, at 3 Ho. 28 M. Morn.				21	10 16
				26	8 25
1	21	D	S. aft. Epiph.	Purification But let them with their Learning go, And make a mighty Fuss; We boast no learned Skill—Oh no! That's not the Case with us.	
2	22	M	Candlemas Day		
3	23	T	Blase		
4	24	W			
5	25	T	Agatha	Learning we've none; yet we are bold; Nor Livings have we fat: Thus the Apostles were of old; So we're like them in that.	
6	26	F			
7	27	S			
8	28	D	Septuages. Sun.		
9	29	M		That Paul his Arms were stretched out In Scripture you will see; Look in the Acts, or thereabout, The same likewise do we.	
10	30	T			
11	31	W			
12	1	T	Hil. T. ends.		
13	2	F	Old Candlemas	We so extend Voice, Arms, and Head; You'd think if you was out; The Devil in a Brimstone Bed, Lay roaring of the Gout.	
14	3	S	Valentine		
15	4	D	Sexages. Sund.		
16	5	M	Day n. 2h. 14m.		
17	6	T	h sets 5h. 32m.	Quinquagesima Pr. Adol. F. born. Shrove Tu. To show Religion's not a Farce, Must Persecution back her; 'Twas but last Night pin'd to my A—e, Went bounce, bounce, bounce, a Cracker.	
18	7	W	[morn.		
19	8	T			
20	9	F			
21	10	S			
22	11	D	Shrove Sunday		
23	12	M			
24	13	T	St. Matthias		
25	14	W	Ash Wednesd.		
26	15	T			
27	16	F	[18m.		
28	17	S	Day li. ends 7 h.		

Observations in FEBRUARY.

M	Clock
D	hef. ☉

Two Days of Note this present Year;
In this short Month do both appear;
Which every Maid and every Man takes
For Valentines and eating Pancakes.

1	14m	8"
6	14	34
11	14	39
16	14	25
21	13	54
26	13	1

1	i	a	4	ii	iv	7		Again, what the great Addison
2	morn.	24	36			8	Perhaps they	has put into the Mouth of Cato
3	o	49	23	37		9	all may be	is certainly true.
4	i	56	21	39	10		my Betters,	"If there is a God, he must
5	3	4	19	41	11		And so I've	delight in Virtue."
6	4	4	17	43	12		out them in	But that there is Nature cries out
7	4	55	15	45	13		red Letters.	in all her Works.—Yet daily Ex-
8	5	39	14	46	14			perience tells us that Vice flour-
9	6	14	12	48	15			ishes, while Virtue starves in this
10	D	rif.	10	50	16		Dick Rice	sublunary Situation; that honest
11	7	A	18	8	52	17	Nimming	Truth is kicked out of Door to
12	8	43	6	54	18		Ned.	make Room for Adulation and
13	10	4	4	56	19			Deceit. Then it must be, if Vice
14	11	22	3	57	20			flourishes while Virtue is neglected
15	morn.	1	59	21				here that an Hereafter stands
16	o	38	i	v	22		How beat	clearly demonstrated.—We know
17	i	44	57	3	23		her Heart,	that we are here but Children of
18	2	44	55	5	24		how sweet	a Day; the hourly passing Bell for
19	3	34	53	7	25		the News,	some departed Soul in the busy
20	4	14	51	9	26		When Mary	Towns of great Commerce gives
21	4	49	49	11	27		heard that	constant Notice of this, and tells us
22	5	16	47	13	28		Dick did	that we are but Probationers here,
23	5	41	45	15	29		chuse	sent into this World to see how we
24	6	1	43	17	30		His Mary	shall behave as Citizens here; and
25	D	sets	41	19			for his Va-	then, either by Disease or what we
26	7	A	18	39	21		lentine;	call Accident, to remove to another,
27	8	25	38	22			N Good Lord!	where we shall be punished or re-
28	9	33	36	24			laid the bow	warded according to the Determi-
							sweet! how	nation of the just Judge of all. This
							fine!	appearing manifestly true, oft have
								I thought within myself; Gracious
								Lord, have I cultivated an Acquain-
								tance with the Learned, the Inge-
								nious, the Pious, the Lovers of
								Virtue; Children of Integrity, and

MARCH hath xxxi Days										M	Decl
										D	South.
First Quarter the	4	} Day	at	10 Hour, 51 M. Night	1	7	17				
Full Moon the	11			1 — 50 M. Aft.	6	5	22				
Last Quarter the	18			2 — 15 M. Aft.	11	3	24				
New Moon the	26			6 — 46 M. Aft.	16	1	26				
☉ enters ♍ 20 Day, 3 Ho. 53 Min. Morn.					21	North					
					26	2	29				
1	18	D	1 Sun. in Lent	<i>David</i>							
2	19	M	Chad								
3	20	T									
4	21	W	Ember Week	Come you who've whor'd, and you who've rak'd;							
5	22	T		We call on every Sinner:							
6	23	F		Ere you're in Hell's hot Oven bak'd							
7	24	S	Perpetua	Take one Soul-saving Dinner.							
8	25	D	2 Sun. in Lent								
9	26	M	Da. 11 h. 24 m. 10	Come Turks, come Moors, come							
10	27	T		Rogues, come Whores,							
11	28	W	Sat. ris. 6 h. 9 m.	Of every Tribe and Nation.							
12		M	T Gregory [morn.	Come all invited, all delighted,							
13	2	F		And make no Botheration.							
14	3	S	D. li. en. 7 h. 35 m								
15	4	D	3 Sun. in Lent	Morality is poor lean Meat,							
16	5	M		And gives you no Relief;							
17	6	T	St. Patrick	But come to us, and we will treat							
18	7	W	Ed. K. W. Sax.	With right good Gospel Beef.							
19	8	T									
20	9	F		To other Faiths, we all apply							
21	10	S	Benedict	A Hell shot as Mustard;							
22	11	D	Midlent Sund.	Then come to us my Friends and buy							
23	12	M		Regeneration Cuffard.							
24	13	T									
25	14	W	Lady Day	Will you not try; and come and buy							
26	15	T		Why then, In Faith and Truth,							
27	16	F		You all may go to Hell below,							
28	17	S		And drink Damnation Broth.							
29	18	D	5 Sun. in Lent								
30	19	M									
31	20	T									

Observations in MARCH.

M Clock
D bef. ☉

March Beer's despis'd I think by few,
So brew and drink, and drink and brew;
For which you have this solid Reason,
Viz.—Drinking's never out of Season.

11 12 33
13 14 24
15 10 6
16 8 40
21 7 10
26 5 24

1	102.39	vi.	v.	5		Men of the most solid Wisdom
2	11 48	32	28	6	Now March	those in whose Company I much de-
3	morn.	30	30	7	comes pur-	lighted, whose Ways were Ways of
4	0 54	28	32	8	ling, huf-	Pleasantness, and all their Paths
5	1 53	26	34	9	But here I	were made in Search of Truth;
6	2 46	24	36	10	wish at times	shall I at my departing Hour never
7	3 23	22	38	11	to spurn out,	hope to see them more, and well
8	4 10	20	40	12	For Fear my	come them again to the Masque of
9	4 42	18	42	13	rhymes won't	of eternal Felicity; do the dearest
10	5 11	16	44	14	last the Year	Friends meet only to part; and part
11	6 14	14	46	15	out.	here never to meet hereafter? Cer-
12	7 A.39	12	48	16		tainly, No.—Yes, ye Shades of my
13	9 0	10	50	17		departed Friends, we shall meet a-
14	10 19	8	52	18	James Jug	gain, and know and be known to
15	11 33	6	54	19	Martha	each other; I am conscious of it.
16	morn.	4	56	20	Mug.	Thus have I reasoned with myself
17	0 38	2	58	21		in the Midnight Hour. On the
18	1 32	v.	vii.	22		other Hand I have reasoned in this
19	2 16	58	2	23		Manner; why should I wish Peo-
20	2 53	56	4	24	The 24th of	ple to know one another after they
21	3 26	54	6	25	March they	have departed hence? When per-
22	3 50	52	8	26	ly,	haps the very first I shall meet may
23	4 13	50	10	27	Is called by	be the Ghost of a Dun, upbraiding
24	4 34	48	12	28	Landed Lords	me with an unpaid Debt;
25	4 53	46	14	29	Lady-day;	Having, as you see, weight'd the
26	5 17	44	16	30	Which is	Affair on both Sides, and never
27	5 31	42	18	1	long wished	yet come to a final Determination,
28	5 43	40	20	2	for by some,	right glad was I when Syntax took
29	5 52	38	22	3	While o-	up the Argument logically, and was
30	6 10	36	24	4	thers with	going regularly forwards according
31	6 17	34	26	5	'twould ne-	to the Elements of that Science as
				6	ver come.	it was written in French by Peter
						du Moulin, and translated by Natha-
						niel Delawne, Bachelor of Arts in
						CAMBRIDGE, and printed by Ni-
						colas Bourn at the Royal Exchange
						London. A. D. 1624.

APRIL hath xxx Days.

M | Dec
D | North.

First Quarter 3 } Day { 8 Hours 40 M. Morn.
Full Moon 9 } at { 11 — 24 M. Night.
Last Quarter 17 } { 7 — 50 M. Morn.
New Moon 25 } { 9 — 57 M. Morn.

1	4	49
6	6	43
11	8	34
16	10	22
21	12	5
26	13	44

☉ enters 8 19 Day at 4 H. 38 M. After.

1	21	W		Maxims or serious Reflections addrested to his Readers by POOR ROBIN.
2	22	T		Cam. Term ends
3	23	F	Richard	Oxf. Term ends
4	24	S	St. Ambrose.	Old Lady Day
5	25	D	Palm Sunday.	The Fools who vainly do suppose That true Content, from Riches flows, Will think it wrong, if once they try, And so think I.
6	26	M		
7	27	T	Da. br. 3h. 18m.	
8	28	W		
9	29	T	Maundy Thurs.	
10	30	F	Good Friday	When I my Betters humbly greet As proudly passing through the Street, If they'll not speak, I'll not reply, So what care I.
11	31	S		
12	ap	D	Easter Day	Why should the Rich, the Proud, the Great, Despise my humble low Estate; If chance they fall, they fall from high And so can't I.
13	2	M	Easter Monday	
14	3	T	Easter Tuesday	Alphege
15	4	W		
16	5	T		
17	6	F	Da. 13h. 58m. 10.	
18	7	S		
19	8	D	Low Sunday	
20	9	M		
21	10	T	[beg.	Affliction's Cup, if to the Brink, When fill'd it is my Lot to drink; I'll soak it off and say I'm dry: So well drunk I.
22	11	W	Oxf. & Camb. T.	
23	12	T	St. George	Prs. Mary born
24	13	F		
25	14	S	St. Mark	If Famine robs me of my Meat, Ev'n that will keep my Breaches sweet; For where nought comes, thence nought can fly: So what care I.
26	15	D	2 Sun. aft. Easter	
27	16	M		
28	17	T		
29	18	W	Easter. Ter. beg.	
30	19	T		

Observations in APRIL.

M	Clock
D	bef. ☉

Of April Fools the Men who minds
The Matter well may see two Kinds;
Which are if you together take them,
The Fools who're made, and those who make them.

13	46
62	17
110	52
16	After.
211	31
262	27

1	Morn.	vi.	vi	7	All Fools
2	0	51	32	28	8 Day
3	1	38	30	30	9
4	2	16	28	32	10
5	2	50	26	34	11 De'el
6	3	13	24	36	12 of Alling-
7	3	45	22	38	13 ton
8	4	10	20	40	14
9	Grises	18	42	F	
10	7A.58	17	43	16	'Twas on
11	9	16	15	45	17 April Day
12	10	26	13	47	18 at Night,
13	11	28	11	49	19 says Nan
14	morn.	9	51	20	I'm ruined
15	0	19	7	53	21 like my Sis-
16	1	0	5	55	22 ter Sue;
17	1	23	3	57	23 Quoth Dick
18	2	0	1	59	24 I own that
19	2	24	iv.	vi	25 he true;
20	2	46	57	3	26 But who's the
21	3	5	56	4	27 April Fool,
22	3	44	54	6	28 Nan, I dr
23	3	45	52	8	29 you?
24	4	6	50	10	30
25	sets	48	12	N	Miles
26	8A.50	46	14	2	Corbet,
27	9	56	43	17	3. Paolet.
28	10	53	41	19	4
29	11	43	39	21	5
30	morn.	37	23	6	

Grieved was I to find that Tri-
gon had artfully turned the Dis-
course into another Channel by
observing the Improbability of
Souls ever meeting again. However
as Syntax had mustered together
a large Assortment of Syllogisms
according to the Rules laid down
by Aristotle; I had still Hopes of
hearing this Matter fairly and
candidly determined; but the Idea
of these sixteen logical Heads,
upon all which Syntax threatened
to treat, so frightened poor Grif-
fin, that he resolved to get shut of
the Argument at any Rate. Mrs.
Griffin who still sat with her
Cap Border turned back, and the
Cavity of her Ear extended, was
highly desirous however of hav-
ing this Point settled. Have a
little Patience, said Griffin and
I'll settle it myself. You settle
a Thing of this Nature, says Mrs.
Griffin with no small Share of
Surprise—I beg Mr. Syntax may
take the Matter in Hand.—You
certainly would not pretend to
attempt an Affair of this Nature,—
Why I can settle a Thing better
than you. I know it, quoth Grif-
fin, and have done ever since the
first Night I was married to you.

MAY hath xxxi Days.

(M) O Decl.
(D) North

First Quarter the 2	} Day at {	3 Hours 2 M. Afr.	11 19	17
Full Moon the 9		9 — 22 M. Morn.	6 16	43
Last Quarter the 17		1 — 44 M. Morn.	11 18	3
New Moon the 24		10 — 20 M. Night	16 19	15
First Quarter the 31		7 — 44 M. Afr.	21 20	19
☉ enters ♐ 20 Day, at 5 H. 13 M. Afr.			26 21	15

1 20 F	St. Phil. & James	Continued
2 21 S	Day br. 2h. 1 m.	
3 22 D	3d Sun. aft. East.	Invention of the Cross
4 23 M		Should Fortune, ever fickle, frown,
5 24 T		On every Stage, and keep me down;
6 25 W	John, E. A. P. L.	If I can't rise; yet I can lie,
7 26 T	Sat. r. 2h. 51 m. m.	So what heed I.
8 27 F	Jup. se. 47 m. m.	When Tumults wild, disturb each
9 28 S	Da. inc. 7h. 32 m.	
10 29 D	4 Sun. aft. Easter	Street,
11 30 M		And Ruffians knock down all they
12 31 T	Old May day	meet;
13 2 W		That's brought to me, six Stories high,
14 3 T		So what mind I.
15 4 F		At Poverty why should I fret,
16 5 S		
17 6 D	Rogation Sun.	That Blessing keeps me out of debt;
18 7 M	Da. 15h 42m. lo.	Since none would trust me if I'd try;
19 8 T	Q. Charlotte b.	So what fear I,
20 9 W		Dunstan.
21 10 T	Ascension.	
22 11 F	Prs. Eliz. born.	Should Sickness rob me of my Mate,
23 12 S		As all must die, or soon, or late;
24 13 D	Sun. aft. Ascen	When Folks are gone why should we
25 14 M	Easter T. ends.	cry;
26 15 T	Augustin Abp.	She's dead; — not I.
27 16 W	Venerable Bede	Did She (Dear Creature,) loathing
28 17 T	Oxford T. ends.	
29 18 F	K. Cha. II. Rest.	Life,
30 19 S	No ni. to July 22	This Scene of Troubles, Noise and
31 20 D	Whit-Sunday	Strife,
		Wish for the Day when she might die;
		Why so wish'd I.

Observations in MAY 1789.

M	Clock
D	aft. C

Now Nymphs and Swains are tripping keen,
To rural music on the green;
While crippled age on crutches waddling,
Can scarcely keep its legs from straddling.

1	3	10
6	3	41
11	3	57
16	3	59
21	3	46
26	3	20

1	Om	23	V	7	om	Pride,
2	0	57	34	26	8	Will Goff.
3	1	27	32	28	9	
4	1	53	31	29	10	
5	2	17	29	31	11	Now the
6	2	42	27	33	12	girls with
7	3	7	25	35	13	beauteous
8	3	37	24	36	14	faces.
9	D	rises	22	38	F	Show their
10	9	a	17	39	16	shape and
11	10	12	19	41	17	all their
12	10	56	18	42	18	graces;
13	11	35	16	44	19	Oh, how
14	morn	14		46	20	tempting,
15	0	5	13	47	21	how de-
16	0	29	12	48	22	lighting,
17	0	51	10	50	23	Soul invit-
18	1	10	9	51	24	ing heart
19	1	20	7	53	25	delighting
20	1	50	6	54	26	Age with
21	2	11	5	55	27	all its cares
22	2	36	3	57	28	and pains
23	3	4	2	58	29	Sees with
24	D	fets.	1	59	N	surprize
25	8	a	53		2	those beau-
26	9	39	58	VIII	3	teous eyes,
27	10	23	57		4	and wishes
28	10	59	56		5	to be young
29	11	30	55		6	again.
30	11	57	54		7	
31	morn	53			8	

Trigon seeing Syntax in a fair way for beginning, turned it off by observing, that all pretensions of searching into things beyond our present conceptions are vain; and in the matter before us there was not in his opinion sufficient data to ground an argument upon.

Mrs. Griffin who had two or three hard words rotting in her head, and wanting to get shut of them, observed, that as we *sartanly* are a *compus mentus* of soul and *spirit*; that is to say, *Chriſti-anity* and *Carnality*, such subjects pleased her muchly; but, continued she, different people have different impositions.

The dispositions of different people are certainly various, replied Syntax. — Nay even the same person at different times has different dispositions.

That is not the case with me, said Sancho, catching up the tankard; I am always disposed for drinking.

Now, Madam, says Syntax, as Ovid elegantly sings,

In nova fert animus mutatas dicere formas.

Mrs. Griffin seemed much edified.

Notwithstanding (continued Syntax) my friend Trigon's suspicions of not having sufficient

June hath xxx Days. P. R. 1789.

M D Dec.
North.

Full moon	7	} Day {	8 hour 17 min. Aft.	I	22	9			
Last Quarter	15		7	5 min. Aft.	6	22	44		
New moon	23		at	8	5 min. Morn.	11	23	8	
First Quarter	30		0	13 min. Morn.	16	23	23		
☉ enters ♉ 21 day, 1 hours 55 min. morn.							21	23	27
							26	23	21

1	21	M	Whit. Monday
2	22	Tu	Whit. Tuesday
3	23	W	Ember Week
4	24	Th	K. Geo. III born
5	25	F	Pr. Ern. Aug. born
6	26	S	
7	27	D	Trinity Sunday
8	28	M	
9	29	Tu	
10	30	W	Oxf. Term beins
11	31	Th	St. Barnabas
12	June	F	Trin. Term begins
13	2	S	
14	3	D	1 Sun aft. Trin.
15	4	M	
16	5	Tu	
17	6	W	St. Alban
18	7	Th	
19	8	F	
20	9	S	Trans. Edw. K. W. S.
21	10	D	2 Sun, aft. Trin.
22	11	M	
23	12	Tu	
24	13	W	Nat. St. J. Bapt.
25	14	Th	
26	15	F	
27	16	S	
28	17	D	3 Sun. aft. Trin.
29	18	M	St. Peter
30	19	Tu	

Nicomede

CONTINUED.

To that receptacle the grave;

Boniface

The rich, the poor, the prince, the
slave,For refuge from their troubles fly:
Then why may'n't I.

Corpus Christi.

And if I can (when pallid death
Relentless stops my latest breath,)
But steer my course above the sky;
Then well steer'd I.The moral to this fine reflection,
We just by way of interjection,
Most humbly hope, you'll be so
kind out

Of your abundant sense to find but.

Longest Day.

To smooth the road that leads thro'
life

Midsummer.

To make the passage free from strife,
Or fear, or grief, or rage;
You'll quickly see was our intent,
The rest, you'll find was only meant
Just to eke out a page.

Observations in JUNE.

M Clock
D aft. Sun.

Reader lee Midsummer slip-by,
And then if you've a mind to try
How highly man will over man lord,
Go pennyless to see your landlord.

1	2	32
6	1	43
11	0	46
16	ber.	
21	1	20
26	2	25

1	0	21	III	VII	9	Of our
2	0	46	51		9	10 small beer
3	1	10	51		9	11 now lads be-
4	1	20	50		10	12 aware,
5	2	7	49		11	13 This rule I
6	2	43	48		12	14 give to all,
7	D	rises.	48		12	F As you thro'
8	3	2	47	47	13	16 life shall
9	9	29	47		13	17 move along,
10	10	2	46		14	18 To let the
11	10	29	46		14	19 quality be
12	10	52	45		15	20 strong.
13	11	12	45		15	21 The quanti-
14	11	31	44		16	22 ty not small.
15	11	50	44		16	23 In brewing
16	morn		44		16	24 mind this
17	0	30	43		17	25 maxim
18	0	33	43		17	26 wives,
19	0	59	43		17	27 If you'd
20	1	39	43		17	28 preserve
21	2	9	43		17	29 your hus-
22	2	58	43		17	30 bands lives.
23	D	sets.	43		17	N
24	8	2	42		17	2
25	9	28	43		17	3
26	9	56	44		16	4
27	10	21	44		16	5 Tippler,
28	10	45	44		16	6 Marplot,
29	11	9	45		15	7 Muggletop.
30	11	34	45		15	8

data where on to ground an argument. I don't in the least doubt but I shall produce data more than sufficient as I go on with my sixteen logical heads.

The devil take the head of him who invented them, said Griffin.

I think a good calve's head is worth them all put together, said Sancho.

I desire, said Mrs. Griffin, hitching her chair nearer the table, that Mr. Syntax may go on.

Trigon now gave all up for lost. He and Sancho lighted each a fresh pipe.—Syntax triumphed. So putting himself into the attitude of a modern disputant.—I begin (says he) with my first logical head, viz, the genius of that which we desire to prove.

Drink first, said Griffin.

Syntax put the tankard to his head, when—Bounce—Zoons—Blood and Thunder—Lord have mercy upon us.—What a crack.—Who's kill'd.—What was it.—Where was it.—How was it. Oh! the tumbledown of the walls of Jericho. The crash of Dagon's temple, and the Tower guns are all nothing to it. Mrs. Griffin has run screaming into the yard, where she luckily falls into the

JULY hath xxxi Days.

M	☉ Decl.
D	North.

Full Moon the	7	} Day {	8 Hours 31 min. Morn.	
Last quarter the	15		11	21 min. Morn.
New Moon the	22		4	1 min. After.
Full Moon the	29		6	20 min. Morn.

☉ enters 22 day, at 6 hours 44 m. aft.

1	23	5
6	22	39
11	22	3
16	21	17
21	20	22
26	19	19

1	20	W	Trin. T. ends
2	21	Th	Visit. of B. V. M.
3	22	F	Dog days begin
4	23	S	Trans. St. Martin
5	24	D	Sun. aft. Trin
6	25	M	
7	26	Tu	Thos. a Becket
8	27	W	
9	28	Th	Day dec. 16 min.
10	29	F	Cam. T. ends
11	30	S	
12	July	D	Sun aft Trin
13	1	M	Oxford Aft.
14	2	Tu	
15	3	W	Swithin
16	4	Th	
17	5	F	
18	6	S	Oxf. Term ends
19	7	D	Sun. aft. Trin.
20	8	M	Margaret
21	9	Tu	
22	10	W	Magdalen
23	11	Th	Sat. fri. 9h. 52m. aft.
24	12	F	
25	13	S	St. James
26	14	D	Sun. aft. Trin.
27	15	M	
28	16	Tu	
29	17	W	
30	18	T	Daylight end at
31	19	F	10 h. 46 m..

Ignotum tibi nolito præponere noli;
Cognita judicio constant, incogni-
ta nasu.

Old Midsummer day

Serene the sky; the evening still,
And folded were the sheep;
Uncclouded o'er the eastern hill,
The silver moon did peep.

Their labour o'er; across the plains
Just at the close of day;
Strephon and Damon, neighb'ring
swains
Together took their way.

From yonder hall, they hear the sound
Of violin and flute:
And now the chorus swells around,
And warbles now the lute.

But where the finer feeling fails,
Ah, what avails the glee?
To souls untun'd, ah, what avails
The voice of melody.

Damon who hear'd the joyful song,
His ireful silence broke,
And murmur'd as he walk'd along,

St. Anne:
To Strephon thus he spoke.

Observations in JULY.										M	Clock
										D	bef. ☉
Now lasses all pray ope your eyes,										1	3 25
Before bright Sol salute your skies,										6	4 18
Up in the morn by break of day,										11	5 2
To take your forks and turn the hay.										16	5 38
										21	5 56
										26	6 3
1	morn	III	VIII	9	Tom Tramp	arms of good Mr. Marten,	who had				
2	0	6	46	14	10 Matthew	been administering carnal comfort	to a holy sifter: Sancho who had but				
3	1	37	47	13	11 Ludlow.	just fully lighted his pipe, that by	oversight, a certain part of his lower				
4	1	18	47	13	12		garments unbutton'd, the sur-				
5	2	10	48	12	13		prize and the sudden start made				
6	3	2	49	11	14	This is the	him empty the fire out of his pipe				
7	Dries	49		11	F	season of the	into his garment thus open for its				
8	8 a	25	50	10	16	year when	reception, and he is jumping and				
9	8	50	51	9	17	twains do o	stradling, and shaking himself all				
10	9	12	52	8	18	the meads	round the room.—As to poor Tri-				
11	9	32	53	7	19	repair;	gon, being unhappily too far from				
12	9	50	54	6	20	And that	the wall, the chair and he both				
13	10	11	55	5	21	the hay may	ell backward; and he is now rub-				
14	10	31	56	4	22	soon be led,	bing a lump which he has made				
15	10	55	57	3	23	The lads	upon the back of his head. But				
16	11	24	58	2	24	shall cock	poor Syntax, just at the nick of				
17	11	58	59	1	25	the lasses	time, when in spite of opposition				
18	morn	IV	VII	26		spread.	he had begun to display his logical				
19	0	42	2	58	27		abilities; — upon my soul 'twas				
20	1	36	3	57	28		hard—for just as he had got the				
21	2	42	4	56	29	Hewson	tankard to his mouth, the noise				
22	D sets	5	55	N	30	Ludlow,	was made; his waistcoat was un-				
23	7 a	54	7	53	2	Taffy,	button'd, and the tankard nearly				
24	8	22	8	52	3	Dun,	full; he, starting, teamed the liquor				
25	8	48	10	50	4		down his bosom; drop'd the tan-				
26	9	11	11	59	5		kard upon the ground; and he is				
27	9	37	12	48	6	What I have	now wringing his shirt upon the				
28	10	6	14	46	7	said I think	floor. This was certainly excef-				
29	10	38	15	45	8	is right,	sively vexatious; but what made it				
30	11	17	17	43	9	I'll go to	more so, was, that in the sudden				
31	morn	18	42	10		bed, and so	fright, his definitions, his divisions,				
						good night.	arguments, and propositions,				
							categorical and hypothetical, his				
							dilemmas and his syllogisms, in				

AUGUST hath xxxi Days.

M D © Dec. North.

Full Moon 5 } 10 Hours 27 Min. Night
 Last Quarter 14 } Day { 2 5 Min. Morn.
 New Moon 20 } at { 11 18 Min. Night
 First Quarter 27 } 3 14 Min. Aft.

© enters 11th 22 day, at 7 hour 3 Min. Aft.

1	17	53
6	16	33
11	15	6
16	13	23
21	11	55
26	10	12

1	21	S	Lammas day
2	22	D	8 Sun. aft. Trin.
3	23	M	Jup. ris. 4h. 17m.
4	24	Tu	morn.
5	25	W	
6	26	Th	Transfiguration
7	27	F	Prs. Amelia born
8	28	S	
9	29	D	9 Sun. aft. Trin.
10	30	M	St. Lawrence
11	31	Tu	Prs. Bruns. born
12	Aug.	W	Pr. Wales born
13	2	Th	
14	3	F	Twilends 9h. 46m.
15	4	S	Assumption
16	5	D	10 Sun. aft. Trin.
17	6	M	
18	7	Tu	D. breaks 2h. 22m.
19	8	W	
20	9	Th	
21	10	F	Pr. W. Henry born
22	11	S	
23	12	D	11 Sun. aft. Trin.
24	13	M	St. Bartholomew
25	14	T	
26	15	W	
27	16	Th	Day breaks 2h. 53m
28	17	F	St. Augustine
29	18	S	St. John Baptist beh.
30	19	D	12 Sun. aft. Trin.
31	20	M	

Oh Strephon when I see these things,
 Then in my breast pale envy springs,
 And robs me of my rest;
 When lab'ring hard I cast my eye
 On these, I think how curst am I,
 And these, alas, how blest.

Could you not wish with all your heart
 Name of Jesus
 To live as well and look as smart,
 As these fine folks do here;
 To have a half as big as this,

Dog days end
 Old Lammas day
 Where every convenience is;
 And live like any peer.

Your cellars stor'd with richest wine,
 Duke of York born
 Your stables stock'd, your gardens
 fine,
 Delightful to your view;
 Your orchards filled to your wish,
 Your park with deer, your ponds with
 fish,
 And all to pleasure you.

Would it not give your heart content,
 When tenants round bring in their
 rent,
 For which they've labour'd hard;
 And when you of their losses hear,
 Then would you turn a careless ear,
 Without the least regard.

Observations in August.

M	Clock
D	be. @

Let sage advice be not forgot

"Drink no small beer when you are hot"

Since weather's warm, and days are long,

Drink what you like; but drink it strong.

1	5	52
6	ong	125
21	negl	45
26	negl	49
23	negl	49
26	I	23

1	om	2	IV	VII	11	Proserpine,
2	9	55	22	38	12	John
3	1	53	23	37	13	Down,
4	2	55	25	35	14	Xantippe.
5	D	rises	26	34	F	
6	7	a	17	28	32	16
7	7		38	30	30	17
8	7		58	31	29	18
9	8		17	33	27	19
10	8		38	35	25	20
11	9		0	37	23	21
12	9		28	38	22	22
13	9		59	40	20	23
14	10		40	42	18	24
15	11		26	44	16	25
16	morn.		45		15	26
17	0		23	47	13	27
18	1		32	49	11	28
19	2		50	51	9	29
20	D	fets	53		7	N
21	6	a	50	54	6	2
22	7		18	56	4	3
23	7		44	58	2	4
24	8		12	V	VII	5
25	8		43	2	58	6
26	9		22	4	56	7
27	10		7	6	54	8
28	10		57	8	52	9
29	11		53	9	51	10
30	morn		11		49	11
31	0		54	13	47	12

Barbara Celarent, &c. according to the rules in Aristotle; together with his sixteen logical heads, as they stand in the Elements of Logic written in French by Peter du Moulin and translated by Nathaniel Delarune, bachelior of arts in C. 1651, and printed by Nicholas Bournes, at the Royal Exchange, London, Anno Domini 1624. These, I say, were all jumbled together, and himself so frightened, that big as he was with the subject, he had quite forgot what he was talking about.

Brother Almanack Maker, do I pray, be so kind as to cast my nativity.

I was born in the year of our Lord 1730. The day was April the 21st, O. S. the time nearly fix in the morning: but as I did not come into the world with a pen and ink in my pocket; for a few minutes I cannot possibly say.—I believe you will find the malignant planets posited in quartiles, oppositions, and such ugly aspects, as would make a man wish to be born over again, never have I endeavoured at a story to my remembrance that I have finished; except the Witch of the Woodlands; that with faithful industry, I went

to the rules in Aristotle; together with his sixteen logical heads, as they stand in the Elements of Logic written in French by Peter du Moulin and translated by Nathaniel Delarune, bachelior of arts in C. 1651, and printed by Nicholas Bournes, at the Royal Exchange, London, Anno Domini 1624. These, I say, were all jumbled together, and himself so frightened, that big as he was with the subject, he had quite forgot what he was talking about.

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SEPTEMBER hath XXX Days.

M	Deci.
D	North.

Full Moon	4	} Day {	2 Hours 7 Min. After.	1	8	3
Last Quarter	12		54 Min. After.	6	6	12
New Moon	19		6 Min. Morn.	11	4	19
First Quarter	26		42 Min. Morn.	16	2	23
22 day 2			3 Hours 28 Min. Aft.	21	0	26
				26	South	

1	21	Tu	Giles	
2	22	W	Lond. burnt 1666	Or when in town you chuse to fix,
3	23	Th	Jup. rises 2h. 59m.	To gallop off in coach and six,
4	24	F	morn.	And spend the winter there;
5	25	S	13 Sun. aft. Trin.	To see the palaces and halls,
6	26			The plays, the operas and balls,
7	27	M	Enurchus	And all the shews most rare.
8	28	Tu	Nat. of V. Mary	When you at song or tale aspire,
9	29	W	D. dec. 3h. 36m.	The song or tale all must admire
10	30	Th		Whether 'tis false or true;
11	31	F	Sat. rif. 6 h. 31 m.	And then to have the parish priest
12	Sep.	S	14 Sun. aft. Trin.	To whom all bow or should at least,
13	2			Pull off his hat to you.
14	3	M	Holy Cross.	Those Lords of earth that look so
15	4	Tu	Ember Week	high
16	5	W		Their haughty manners, how can I
17	6	Th	Lambert.	Behold without disgust;
18	7	F	Day dec. 4h. 10m.	And yet, alas, we plainly see,
19	8	S	15 Sun. aft. Trin.	They're flesh and blood as well as we,
20	9			And turn like us to dust.
21	10	M	St. Matthew	Oh Strephon weigh the matter right,
22	11	Tu	K. Geo. III. crown.	And say how can you bear the sight
23	12	W		And not our case bemoan:
24	13	Th	Jup. r. 2h. 8m. morn	Shall we, altho' as good as they,
25	14	F		While they're at ball, or park, or
26	15	S	St. Cyprian	play,
27	16		16 Sun. aft. Trin.	With daily labour groan.
28	17	M		
29	18	Tu	St. Michael	Prs: Char. Aug. Mar. born
30	19	W	St. Jerome	

Observations in SEPTEMBER.

Observations in SEPTEMBER.				M	Clock	
				D	aft. Sun.	
Now country folks, Heav'n bless your store,				1	0. 23.	
'Tis much I hope, I wish it more:				6	2. 1.	
But beg you'll mind one maxim true,				11	31. 44.	
Town folks must live, as well as you.				16	5. 28.	
				21	7. 12.	
				26	8. 54.	
1	1m	59	V	13	Notreda-	through my self, of being written in the book of the fates, that if I had not finished it, nobody else would.—In the rest I must credit own I have been too often deficient; not through my own fault; but destiny's apparently, if the astrologers say true.
2	3	5	17.	43	amps,	
3	4	10	19	41	Dr. Faustus	
4	D	rises.	21	39	F. Mother	
5	6	a	20	37	Shipton,	
6	6	52	25	35	18	
7	7	15	27	33	19	
8	7	39	29	31	20	
9	8	9	31	29	21	
10	8	45	32	28	22	
11	9	28	34	26	23	Truth is my mind is now inclin'd, To shine among my betters, So now you'll see the noble mi ^e . Stand shinin ^g in red letters.
12	10	21	36	24	24	
13	11	25	38	22	25	
14	morn	40		20	26	
15	0	36	42	18	27	
16	1	52	44	16	28	
17	3	15	46	14	29	
18	4	38	48	12	30	
19	D	sets.	50	10	N	
20	6	a	21	8	2	
21	6	52	54	6	3	POOR ROBIN.
22	7	28	56	4	4	But don't you paint me as a saint, With bend-ed leg I humbly beg.
23	8	10	58	2	5	
24	9	0	VI	V	6	
25	9	56	2	58	7	
26	10	57	4	56	8	
27	morn	6		54	9	
28	0	1	8	52	10	
29	1	7	10	50	11	
30	2	12	12	48	12	

OCTOBER hath xxxi Days.					M D	Decl. South
Full Moon	4	} Day at	7 hours	5 min. Morn.	1	3 27
Last Quarter	12		1	37 min. Morn.	6	5 33
New Moon	18		4	19 min. Aft.	11	7 17
First Quarter	25		8	8 min. Aft.	16	9 9
☉ enters 11 22 day at 11 hours 24 min. Night					21	10 57
					26	12 42
1	20	Th	Remigins	Then tell me, Strephon, is't not hard		
2	21	F	Sat. sets 4h. 13m.	That we should toil without regard,		
3	22	S	morn.	And drag a life of pain;		
4	23	D	17 Sun. aft. Trin.	Thro' Summer's heat, or Winter's cold,		
5	24	M		To reap the fruit, or turn the mold,		
6	25	Tu	Faith	While others get the gain.		
7	26	W	D. break 4h. 31 m			
8	27	Th		while they unheedful sport and play		
9	28	F	St. Denys	The joyful night, the livelong day,		
10	29	S	On. and C. T. beg.	Old Michaelmas Day.		
11	30	D	18 Sun. aft. Trin.	And spend their happy hours,		
12	Oct. 1	M		In eating, drinking, singing, smok-		
13	2	Tu	Trans. of K. Ed.	ing.		
14	3	W		Dancing, playing, laughing, joking,		
15	4	Th		While toil and care are ours.		
16	5	F		'Twould almost tempt a generous		
17	6	S	Etheldred	mind		
18	7	D	19 Sun. aft. Trin.	St. Luke		
19	8	M		To call ev'n Providence unkind,		
20	9	Tu		When we such distance spy;		
21	10	W		Oh Strephon; what must that man		
22	11	Th		be		
23	12	F		Who can this mighty difference see,		
24	13	S		Without an envious eye		
25	14	D	20 Sun. aft. Trin.	K. Geo. III. ac. Crispin		
26	15	M	K. Geo. III. procl:	Strephon reply'd; contented in the		
27	16	Tu		place		
28	17	W	St. Simon and Jude	By Heaven sign'd, Envy nor chide		
29	18	Th		can ease		
30	19	F		Nor know I but I in my cottage may,		
31	20	S		(Tho' not so rich) as happy be as		
				they.		

Observations in OCTOBER.

M	Clock
D	aft. Sun.

Now take advice that's good and Tober,
Strong ale to brew this month October.
My scheme is good you may depend on't,
If not,—I lye,—so there's an end on't.

1	10 32
6	12 2
11	13 21
16	14 28
21	15 20
26	15 55

1	3 m 17 VI	V 13	I know it	our fright; we will search into
2	4 21 16	44 14	well, I said	the cause of all this sad disaster.
3	5 25 18	42 15	at first,	
4	D rises 20	40 16	Writing	
5	5 a 53 22	38 17	this part	
6	6 22 24	36 18	may I be,	
7	6 55 26	34 19	curst,	
8	7 36 28	32 20		
9	8 24 29	31 21	Old Noll,	
10	9 21 31	29 22	Tyburn's	
11	10 29 33	27 23	glory.	
12	11 40 35	25 24		
13	morn 37	23 25	If I'll o'er	
14	0 59 39	21 26	all such	
15	2 12 41	19 27	nonsense	
16	3 40 43	17 28	poor,	
17	5 2 45	15 29	But take	
18	D sets 47	13 30	what others	
19	5 a 29 49	11 31	wrote be-	
20	6 10 51	9 32	fore.	
21	6 56 53	7 33		
22	7 51 55	5 34	Sainsford	
23	8 52 56	4 35	strong.	
24	9 56 58	2 36	Black-Bals,	
25	11 0 VII	2 37	Frowfy	
26	morn 2	8 38	Moll,	
27	0 6 4	58 9	I wrote to,	
28	1 2 6	56 10	I thought	
29	2 15 8	54 11	to.	
30	3 20 9	52 12		
31	4 25 11	51 13		
		49 14		

Our host Griffin, you may all along have observed, was terribly afraid of being tormented, or as he himself expressed it, having his brain pan distracted with Syntax's sixteen logical heads, but resolving at all events to put a stop to it, when he said, have a little patience and I'll soon settle the matter myself; he stood facing the fire, with his back to the company; so under pretence of pulling the fire together, he conveyed, unobserved by any, a blown bladder to the back of it, and covered it with the ashes; as the bladder warmed, the air expanding, burst it with a loud report, which not only put the whole company into confusion, but at the same time blew up Syntax's sixteen logical heads, and we heard no more of *Peter du Moulin*, *Nathaniel Delawne*, nor *Nicholas Bourne at the Royal Exchange*, during the whole night.

I wished here to have introduced good Mr. Martext, as we have him in the house, and the former Conversation quite blown up; but it must not yet be; nor indeed is it proper to bring in a fresh personage

NOVEMBER hath xxx Days.

M D Decl South.

Full Moon	3	} Day at {	0 hours 22 min. Morn.	1	14	40	
Last Quarter	10		10	30 min. Morn.	6	16	13
New Moon	17		3	29 min. Morn.	11	17	38
First Quarter	24		3	42 min. Morn.	16	18	56
☾ enters ♀ 21 day at 7 hour 37 min Aft				21	20	6	
				26	21	6	

1	21	D	21 Sun. aft. Trin.	All Saints
2	22	M	Pr. Edw. born	All souls
3	23	Tu	Prs. Sophia born	Content with what I have, tho' small
4	24	W	Jup. r. 1 h. 8 m. mor.	my store,
5	25	Th	Powder plot 1605	If I've enough why should I wish for
6	26	F	Leonard	Mich. Term begins
7	27	S	D. Cumb. born	more;
8	28		22 Sun. aft. Trin.	Prs. Aug. Sop. born
9	29	M	Ld. Mayor's d. at L.	And which would you the happier sta-
10	30	Tu		tion call,
11	31	W	St. Martin	Free in a cot, or service in a hall?
12	Nov.	Th		While luxury lays in stock of pain,
13	1	F	Britius	'Tis exercise invigorates the swain,
14	2	S	Day dec. 7 h. 43 m.	Though coarse my be my food, 'tis
15	3	D	23 Sun. aft. Trin.	wholesome quite,
16	4	M		Machutus
17	5	Tu	Hugh B. of Lincoln	And honest labour gives me appetite.
18	6	W		Can beds of down procure a night of
19	7	Th		rest?
20	8	F	Edmund K. & Mar	Where pain or fears torment the
21	9	S		troubled breast,
22	10	D	4 Sun. aft. Trin.	The villager (his daily labours o'er,)
23	11	M	St. Clement	Will sleep embrace, tho' even on a floor
24	12	Tu	Jup. r. 1 h. om. aft.	Cecilia Old Martinmas d.
25	13	W	Catherine D. Glo. b.	What tho' no servants round my man-
26	14	Th		sion wait,
27	15	F		Poverty needs no porter at the gate.
28	16	S	Mich. Term ends	Let useless riches wait on pamper'd
29	17	D	Advent Sunday	pride,
30	18	M	St. Andrew	All natures wants are quickly satisfy'd.
	19			Is there nought else but wealth can
				care beguile?
				Yes: yonder see my lovely Phillis smile

Observations in NOVEMBER. 1782.

M D Clock
aft. Sun.

In the fifth of November most people delight,
And a well roasted Pope is a mighty fine sight.
This day like true Britons, we all claim a share in,
Some to drink and huzza; some to pray, or to sweat in.

1	16	13
6	16	7
11	15	39
16	14	49
21	13	39
26	12	9

1	5	m 30	11
2	D	rises	15
3	5	a	17
4	5	38	18
5	6	25	20
6	7	19	22
7	8	21	24
8	9	32	25
9	10	40	27
10	morn		29
11	0	3	30
12	1	21	32
13	2	41	33
14	4	1	35
15	5	22	37
16	6	40	38
17	D	sets	40
18	5	a	34
19	6	33	42
20	7	37	44
21	8	42	45
22	9	49	47
23	10	55	48
24	meru		49
25	0	0	51
26	1	4	52
27	2	7	53
28	3	11	54
29	4	16	55
30	5	21	56

14	15	I took Poor
45	F	Robins
48	17	look them
42	18	through,
40	19	And now
38	20	thought I
36	21	for some-
35	22	thing new,
33	23	-----
31	24	Simon Ma-
30	25	rus.
28	26	Arthur
27	27	radly,
25	28	Tom
23	29	Tham's.
22	30	-----
20	N	But this was
19	2	low and
18	3	that was
16	4	trite,
15	5	And much-
13	6	I found but
12	7	nothing
11	8	right.
9	9	So hurling
8	10	them upon
7	11	the self,
6	12	Forgot
5	13	them all
4	14	and wrote
		myself.

when the performance is so near
concluding, that you have not
the least opportunity of getting
acquainted with him!

Besides he is now busy in the
back parlour, administering com-
fort to poor affrighted Mrs. Grif-
fin, over a bottle of cherry brandy.

However, I have got my com-
pany joyous again, and the tan-
kard goes merrily round.

Come, says Griffin, clapping
his hand upon Sancho's shoulder,
give us a string of proverbs.

I had huddled up a score, said
Sancho, but they are all flown.

Flown, whither?

Heaven knows, said Sancho;
I fancy they are flown after the
sixteen logical heads.

Come, says Trigon, in order to
amuse ye, if it be agreeable, I
will read you one of Snod's scrolls,
which he designed, had he lived,
to have exhibited with his wooden
actors.

DECEMBER hath xxxi Days.					M D	Decl. South
Full Moon	2	} Day at }	4 hours 39 Min. Aft.	1	21	56
Last Quarter	9		6 17 Min. Aft.	6	24	36
New Moon	16		4 43 Min. Aft.	11	23	5
First Quarter	24		1 11 Min. Aft.	16	23	22
☉ enters ♍ 21 day at 7 h. 59 m. Morn.					21	23 27
				26	23	21
1	20	Tu		Waiting to meet her husband at the door,		
2	21	W	h sets ob. 2m. morn.	(for more.		
3	22	Th	Jup. r. 10h. 24m. af.	And bless'd with her can mortal with		
4	23	F		Happy the man with coal and candle		
5	24	S		blest; (west:		
6	25	D	2 Sun. in Advent	He dreads not Phobus frowning in the		
7	26	M	D. break 5h. 57m.	Nicholas :		
8	27	Tu	Conception of V.M.	But lights his candle up and mends		
9	28	W	Day dec. 8h. 42m.	his fire,		
10	29	Th		And willingly he lets the god retire.		
11	30	F		Happy the man bless'd with a cellar		
12	Dec.	S		stor'd (afford:		
13	2	D	3 Sun. in Advent	With the rich juice the vintage does		
14	3	M	Twil. ends 6h. 1m.	And studies only how to make it wider		
15	4	Tu		For greater stocks of poster, ale and		
16	5	W	O sapientia Em. W.	cyder.		
17	6	Th	Oxford Term ends	Happy is he who joyfully can boast		
18	7	F	Day 7h. 44m. long	His pantry large, and fill'd with bread		
19	8	S		and roast;		
20	9	D	4 Sun. in Advent	While a full loaded table to his wife,		
21	10	M	St. Thomas	Sets to his view or sight, or fowl, or fish.		
22	11	Tu		Yet bless'd with these, without con-		
23	12	W		tent and health (wealth:		
24	13	Th	D. break 6h. 1m.	Shortest day.		
25	14	F	Christmas day	It fares the wretch amidst abundant		
26	15	S	St. Stephen	And what avails great store of drink		
27	16	D	St. John	or meat?		
28	17	M	Holy Innocents	To him who dare not drink or eat		
29	18	Tu	Twil. ends 6h. om.	Say, where's the pleasure for a man		
30	19	W		to talk on,		
31	20	Th	Silvester	Sunday after Christmas		
				Those lands, the god forbids the		
				wretch to walk on;		
				Or where's the joy whose days to spend		
				O'er heaps of gold, this joyful heap		
				shall spend?		

Observations in DECEMBER. 1789.

M	Clock
D	aft. Sun.

The man who has nor coin nor credit,
The Lord Almighty help his head, if
Has small occasion to remember
That Christmas feasting's in December.

1	10 10
6	8 19
14	6 3
16	3 19
21	1 8
26	10 10

1	6m 26	VII	IV	15	Ye ancient	Why, said Sancho, has he left
2	D rises	58	2	16	authors of	anything like this?
3	5 2	6 59	1	17	Poor Ro-	
4	6 9	VIII	II	18	bin's,	Undoubtedly, said Trigon: I
5	7 16	1	59	19	man's man	would do him no good to have taken
6	8 29	2	58	20	and men	them along with him. Yes,
7	9 44	3	57	21	made bob-	there are three tragedies. viz. Jane
8	11 1	3	57	22	bins,	Shore, Fair Rosamond, and the
9	morn	4	56	23	I this year	Babes in the wood. In the Comic
10	0 18	5	55	24	think no	line there is Punch turned Pilgrim,
11	1 37	5	55	25	more about	or the Pilgrim's Progress, the Dra-
12	2 53	6	54	26	you,	gon of Waverley, and the delight-
13	4 11	6	54	27	B-cause this	ful play of Punch's transforma-
14	5 24	7	53	28	year I've	tion, which I have now in my
15	6 33	7	53	29	done with-	pocket: so pulling a book out of
16	D sets	7	53	30	out you;	his waistcoat pocket, here it is,
17	5 2	8	52	31	But slow	said he.
18	6 12	8	52	32	my friends	
19	7 20	8	52	33	N of this no	Right glad was Griffin, and the
20	8 26	8	52	34	more,	company all expectation. Trigon
21	9 32	8	52	35	And very	began, as he opened the book, with
22	10 36	8	52	36	glad I am	All the First, scene the First.
23	11 39	8	52	37	its o'er.	
24	morn	8	52	38		Enter Goodness.—What's the
25	0 43	9	53	39	Roast beef	matter?—I ask ten thousand par-
26	1 45	7	53	40	plain pud-	dons. But instead of Sm's droll,
27	2 51	7	53	41	ding, Biaz	it turns out to be a Moravian
28	3 55	6	54	42	puddles,	Hymn Book.
29	5 0	6	54	43	Pork pies,	Disappointment sat upon every
30	5 56	6	54	44	&c. &c.	countenance.—However, said he,
31	6 40	6	54	45	&c. &c.	I can repeat a poem of his, by
						heart, but for that we must refer
						you to the forty-second page of this
						selectable performance.

A TABLE of Terms and Returns for 1789.

Very necessary for all those who have no more sense than to go to law.

Hillary Term begins Jan. 23, and ends Feb 12.

Returns or Effign Days.		Ex.	Ret.	Ap.	
In eight Days of St. Hillary,	-	Jan. 20	21	22	23 Friday
From the Day of St. Hillary, in 15 days	-	27	28	29	30 Friday
On the Mor. of the Purif. B. V. M.	-	Feb. 3	4	5	6 Friday
In eight Days of the Purif. B. V. M.	-	9	10	11	12 Turfd.

Easter Term begins April 29, ends May 25

In fifteen days after Easter	April 26	27	28	29	Wedn.
From the Day of Easter in 3 Weeks	May 3	4	5	6	Wedn.
From Easter day in 1 Month	10	11	12	13	Wedn.
From Easter day in 5 Weeks	17	18	19	20	Wedn.
On the Morrow of the Ascension	22	23	24	25	Monnd.

Trinity Term begins June 12 ends July 1.

On the morrow of the Holy Trinity	June 8	9	10	12	Friday
In eight Days of the Holy Trinity	14	15	16	17	Wedn.
From the Day of the Holy Trinity in 15 Days	21	22	23	24	Wedn.
From the Day of the Holy Trin. in 3 Weeks	28	29	30	31	Wedn.

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the morrow of All Souls,	Nov. 3	4	5	6	Friday
On the morrow of St. Martin,	12	13	14	16	Monnd.
On the octave of St. Martin.	18	19	20	21	Saturd.
In 15 days of St. Martin,	25	26	27	28	Saturd.

N. B. No fittings in Westminster-hall on the second of February, Ascension Day, Midsummer Day.

The Exchequer opens eight days before any Term begins, except Trinity, before which it opens but four days.

Note, That the first and last days of every Term, are the first and last days of appearance.

If that place where Old Satan curst
Is cast, be justly reckon'd,
In rank to stand as hell the first,
Then Law is hell the second,

POOR ROBIN,

1789.

Which our Forefathers always reckon'd,
And mostly call'd it, Part the Second.

Common Notes for the Year 1789.

Golden Number 4	Cycles of the Sun 6	Number of Direction 22
The Epact 5	Roman Indiction 7	Dominical Letter D

ASTRONOMICAL CHARACTERS,

PLANETS

- ☉ The Sun.
- ☾ The Moon.
- ☿ Mercury.
- ♀ Venus.
- ♂ Mars.
- ♃ Jupiter.
- ♄ Saturn.
- ♊ Ascending Node.
- ♋ Descending Node.
- ♌ Conjunction.
- ♍ Opposition.

SIGNS of the ZODIAC.

- ♈ Aries.
- ♉ Taurus.
- ♊ Gemini.
- ♋ Cancer.
- ♌ Leo.
- ♍ Virgo.
- ♎ Libra.
- ♏ Scorpio.
- ♐ Sagittarius.
- ♑ Capricorn.
- ♒ Aquarius. ✕ Prices.

THE ANATOMY.



Within this Ball, to shew you all
Would neither be fair nor polite :
So look you Nelly, there's the Belly ;
But the Secrets are hid from your Sight ;

Of the ECLIPSES for the present Year. 1789.

IN my last Ephemeris, I gave a wonderful and learned Account of Eclipses, and how the word Eclipse was derived from the Latin Word *Eclipse*, which Word was also deriv'd from the Greek Word *Εκλipsis*, which I learnedly observed, was very likely derived from some Hebrew Root or other. But my Hebrew Lexicon being at Times not at Home, as for the greater Security of so valuable a Book, I had very prudentially put it in the Possession of an honest Pawnbroker; a Man highly eminent for taking particular Care of whatsoever is committed to his Charge; I omitted carrying the Derivation any higher than the Greek.

I likewise in the abovementioned Performance observed the modern Mode of securing the many Words which we had borrowed from the Ancients to ourselves, by either Abbreviations or Augmentations; that is to say, either clipping them shorter, or hammering them out, with several convincing Instances to confirm the Same. We likewise give the Nature and Manner of an Eclipse, which we in a modest and becoming Manner elucidated with a Case between Nelly and Roger. And to finish the whole in the highest Manner, and at the same Time adapt it to the meanest Capacity, we closed the whole with that great and wonderful Invention of a walking Orrery.

For Particulars, we refer our Readers to the Work itself; or as the first Edition, by Reason of the great Run that Performance had, has been long sold off; we refer them to the second Impression, which will be illustrated with Annotations, Marginal Notes, &c. and ready for the Press, as soon as a proper Subscription shall be procur'd; therefore not to hinder Time or waste Paper; according to our usual Brevity we straight begin to treat

Of the *Eclipses* for the present Year 1789.

This sublime Subject, oh it requires the Aid of Poetry;

Sing heav'nly Muse; oh, sing in solemn Strain,

Of the Orbs in the Sky,

How like Footballs they fly;

●! it's so heav'nly I'll begin again.

Of

Of the *Eclipses* in the Year 1789.

Within the Compass of this Year will be
 Eclipses less than Five, and more than Three,
 In short there's Four; and neither more nor less;
 Two of the Sun; the other you may guess.
 But then to tell thee how,—the where,—the when,
 That's not a Task
 Of Muse to ask,
 So you gentle Muse
 May depart if you chuse;
 Most readily the Muse reply'd, Amen.
 Then soaring high on Wing as light as Feather,
 She left Astronomy and Prose together.
 These two agreed it, after some debate,
 That Prose should write;—the other calculate.

Astronomy, (ever right watchful and steady,)
 For he always at Hand had his Telescope ready.
 He brought his Tables which he us'd;
 I wish'd he'd brought some Drink out:
 And while he wisely them persu'd,
 Prose pull'd his Pen and ink out.

Says Prose, while you're poring, and searching about
 These plaguy Eclipses to find them all out,
 Suppose—
 But hark, says my Reader, how can you suppose
 That a jingle of Rhiming should e'er come from Prose;
 'Tis like seeking a Rose on the Heath,
 Oh but (quoth I,) the Subject's fir'd him
 With Thoughts sublime; the God's inspir'd him,
 And he's rhyming in spite of his Teeth.
 And see already he's begun a Line.

Of the *Eclipses* in the Year 1789.

To this Reply, Astronomy an Answer made in brief,
 Come now let us go forward without any pother,
 There are Tables to write about one Thing or other,
 So take another Leaf.

A TABLE *showing* the MOON'S SOUTHING for the
with her either

M.	Jan.		Feb.		March.		April.		May.		June.		
D.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	
1	3	a 40	4	a 19	3	a 5	4	a 88	5	a 27	6	a 52	
2	4	22	5	6	3	54	5	34	6	21	7	43	
3	5	3	5	56	4	45	6	36	7	13	8	34	
4	5	46	6	49	5	39	7	26	8	5	9	26	
5	6	32	7	46	6	35	8	21	8	57	10	20	
6	7	21	8	45	7	33	9	15	9	49	11	14	
7	8	14	9	46	8	31	10	8	10	43	Morn.		
8	9	11	10	45	9	28	11	2	11	48	0	8	
9	10	10	11	43	10	25	11	57	Morn.		1	1	
10	11	13	Morn.		11	20	Morn.		0	33	1	52	
11	Morn.		0	40	Morn.		0	52	1	28	2	41	
12	0	13	1	34	0	15	1	47	2	22	3	27	
13	1	11	2	27	1	9	2	43	3	14	4	10	
14	2	7	3	20	2	1	3	38	4	4	4	52	
15	3	0	4	13	2	59	4	31	4	51	5	33	
16	3	52	5	6	3	54	5	21	5	36	6	15	
17	4	42	5	58	4	48	6	9	6	19	6	58	
18	5	32	6	50	5	40	6	55	7	0	7	43	
19	6	23	7	41	6	31	7	39	7	42	8	30	
20	7	14	8	3	7	20	8	21	8	25	9	21	
21	8	5	9	18	8	7	9	3	9	9	10	15	
22	8	50	10	3	8	52	9	45	9	50	11	11	
23	9	46	10	47	9	35	10	28	10	45	0	a 9	
24	10	35	11	29	10	17	11	13	11	37	1	7	
25	11	22	0	A	11	10	59	0	a 1	0	a 32	2	4
26	0	A	6	0	53	11	41	0	52	1	29	2	59
27	0	48	1	35	0	a 25	1	45	2	26	3	52	
28	1	30	2	19	1	11	2	40	3	22	4	43	
29	2	11			1	59	3	36	4	17	5	34	
30	2	53			2	50	4	32	5	10	6	25	
31	3	35			3	44			6	1			

YEAR

YEAR 1789, highly necessary for all who have any Business by Land or Water.

M.	July.		Aug.		Sept.		Oct.		Nov.		Dec.				
D.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.			
1	7	a	18	8	a	43	10	a	10	a	12	11	a	25	
2	8		9	9		34	10		11		59			Morn.	
3	9		2	10		23	11		27		42			Morn.	
4	9		56	11		10			Morn.		0				
5	10		49	11		56	0		10		26	1		39	
6	11		40			Morn.	0		52	1	11	2		31	
7			Morn.	0		40	1		34	1	58	3		24	
8	0		29	1		22	2		18	2	47	4		17	
9	1		16	2		4	3		4	3	38	5		10	
10	2		0	2		46	3		32	4	31	6		3	
11	2		43	3		29	4		42	5	25	6		55	
12	3		25	4		13	5		35	6	20	7		47	
13	4		6	5		0	6		29	7	14	8		39	
14	4		48	5		49	7		25	8	8	9		32	
15	5		31	6		41	8		21	9	2	10		27	
16	6		16	7		36	9		17	9	36	11		24	
17	7		4	8		32	10		13	10	50	0	a	21	
18	7		56	9		30	11		8	11	46	1		18	
19	8		51	10		28	0	a	4	0	a	44	2		14
20	9		48	11		25	1		1	1	42	3		8	
21	10		47	0	a	22	1		57	2	39	3		58	
22	11		46	1		18	2		54	3	35	4		45	
23	0	a	44	2		13	3		50	4	29	5		30	
24	1		39	3		7	4		45	5	20	6		13	
25	2		33	4		1	5		39	6	8	6		55	
26	3		26	4		56	6		31	6	51	7		36	
27	4		18	5		51	7		21	7	38	8		18	
28	6		11	6		44	8		8	8	29	9		1	
29	6		4	7		36	8		53	9	2	9		47	
30	6		57	8		26	9		37	9	44	10		35	
31	7		50	9		14			10	27		11		42	

To oblige our numerous Readers on the Sea Coasts, and make the Ephemeris of general Use; we have again inserted the Tide Table.

Note, That the Moon's Age being taken notice of in the Table, you have the Time of High Water at all the undernamed Places.														
Queenborough, Portinouth, Southampton, Kentish-Knook, Leith, Beesby, Isle of Wight, Dunkirk, Can-Isle Coast of Flanders at the Spit and Dover Pier.														
Graveland Downs, Blackwall, Kinnery, and Selly Halfride, North-Cape before Godcut, and between Cahis and Dover.														
London, Tinnmouth, Hartlepool, Amsterdam, Whirby, Dort, Gastoyn, West of Ireland, at Grob, at Rotterdam, and in Robin-Bood's Bay.														
Newcastle, Humber, Falmouth, Severn-mouth, at the Spurn between Scilly and Lisard, Ramsey, Darpmouth, Guernsey, Torbay, St. Malo's.														
Rymecourt, Antwerp, Hull, St. David's, Holmes of Bristol, Landy, St. Paul's, Salcom without Wharf, at Waverford, and a Lynne Half-tide.														
Bristol-Key, Weymouth-Key, Alaborough, Foulness, Linn, the Start before St. Nicholas, Sedmouth, in the Channel, between Foy and Falmouth.														
Yarmouth-Road, Harwich, Cahis-Road, Dover, Cowes, Caen, the Frith, South-Foreland, St. Helen's, Coast of Normandy, and Picardy.														
Hague, Peter-Port, Dublin, between Beachy and the Isle of Wight, Yarmouth, St. Magnus's Sound, Comby, without the Caskets in the Channels.														
1	6	12	48	2	18	3	48	6	3	6	48	7	33	11
2	17	1	36	3	6	4	36	6	51	7	36	8	21	12
3	18	2	24	3	54	5	24	7	39	8	24	9	9	13
4	19	3	12	4	42	6	12	8	2	9	12	9	57	1
5	20	4	0	5	30	7	0	9	15	10	0	10	45	2
6	21	4	48	6	18	7	48	10	3	10	48	11	33	3
7	22	5	36	7	6	8	36	10	51	12	36	12	21	4
8	23	6	24	7	54	9	24	11	39	12	24	1	9	4
9	24	7	12	8	42	10	12	12	27	1	12	2	57	5
10	25	8	0	9	30	11	0	1	15	2	0	2	45	6
11	26	8	48	10	18	11	48	2	3	2	48	3	33	7
12	27	9	36	11	6	12	36	2	51	3	36	4	21	8
13	28	10	24	11	54	1	24	3	39	4	24	5	9	8
14	29	11	12	12	42	2	12	4	27	5	12	5	57	9
15	30	12	0	1	30	3	0	5	15	6	0	6	45	10

The foregoing Table explained.

NOTE, that the Moon's Age being taken notice of by the Rule in this TABLE, you may obtain the Time of High Water at all the Places abovenamed. Observe, When the Moon is one or sixteen Days old, it is HIGH WATER at London, Tinnmouth, Hartlepool, &c. at 3 o'Clock, and 48 Minutes past. Observe, the same of the rest, is plain to the meanest Capacity. The Day of the Moon's Age you in the sixth Column on every left-hand Page of the Calendar.

A TABLE of all the **KINGS** and **QUEENS** of *England* since the **CONQUEST** in 1066.

Names of Kings.	Born A.D.	When they began to reign.	Reigned Y. M.	Since their reigns ended.	Where buried
William I.	1027	1066, Octob. 14	20	11702, Septem. 9	Caen Nor.
William II.	1057	1087, Sept. 9	12	11689, August 2	Winchest.
Henry I.	1068	1100, Aug. 2	35	11654, Decemb. 1	Reading
Stephen	1105	1135, Dec. 1	18	11635, Octob. 23	Feverham

Saxon Line restored.

Henry II.	1133	1154, Octob. 25	34	8600, July 5	Fountains
Richard I.	1156	1189, July 6	9	9590, April 6	Fountains
John	1165	1199, April 6	19	6593, October 19	Worcester
Henry III.	1207	1216, Octob. 16	56	1517, Novem. 16	Westmin.
Edward I.	1239	1272, Nov. 16	34	2422, July 7	Westmin.
Edward II.	1284	1307, July 7	19	7462, Jan. 25	Gloucest.
Edward III.	1312	1327, Jan. 25	50	5412, June 21	Westmin.
Richard II.	1366	1377, June 21	22	3390, Septem. 20	Westmin.

Lancaster Line

Henry IV.	1367	1399, Sept. 29	31	6376, March 20	Canterb.
Henry V.	1389	1413, March 20	9	5367, August 31	Westmin.
Henry VI.	1421	1422, August 31	38	6328, March 4	Windfor

York Line.

Edw. IV.	1442	1461, March 4	22	1306, April 9	Windfor
Edward V.	1471	1483, April 9	0	2306, June 25	Unkno.
Rich. III.	1443	1483, June 22	2	2304, August 22	Leicester

Families united.

Henry VII.	1456	1485, Aug. 22	23	8280, April 2	Westmin.
Hen. VIII.	1492	1509, April 22	37	9242, Jan. 28	Windfor
Edw. VI.	1537	1547, Jan. 22	6	5236, July 6	Westmin.
Q. Mary.	1516	1553, July 6	5	4231, Nov. 17	Westmin.
Q. Elizab.	1533	1558, Nov. 17	44	4186, March 24	Westmin.

Crowns united

James I.	1566	1603, March 24	22	0164, March 27	Westmin.
Charles I.	1600	1625, March 27	23	10140, Jan. 30	Windfor
Charles II.	1630	1649, Jan. 30	36	0104, Feb. 13	Westmin.
James II.	1633	1685, Feb. 13	4	0100, Feb. 13	S. Germ.
Will. III.	1650	1689, Feb. 13	13	187, March 8	Westmin.
Q. Anne	1665	1702, March 8	12	575, August 1	Westmin.
George J.	1660	1714, August 1	12	1062, June 11	Hanover
George II.	1685	1727, June 11	33	429, Octob. 25	Westmin.
Geor. III.	1738	1760, Oct. 26	Crowned Sept. 22, 1761.		

For our great Monarch, Day by Day

Let Soldiers fight, and Bishops pray;

I'll do my Part likewise;

For while the plodding Statesmen think,

I'll calmly sit me down and drink,

And that will help Excise.

Of the Eclipses which will happen in the Year 1789.

IN the present Year there will be four Eclipses, viz. two of the Sun and two of the Moon; one only of which will be visible to the Inhabitants of Great Britain; but (to speak like a modern Author) the great Demand there is for this Ephemeris in all Parts of the Globe, demands my utmost Attention, that every One, wherever situated on this terrestrial Globe, may know where they will be seen; and of Consequence, where they will not.

The first is a partial Eclipse of the Moon, and will happen according to the best Tables Astronomy has yet produced, on Saturday, the Ninth Day of May, in Manner following:

Beginning	-	8 H. 38 Min.	} in the Morning.
Middle	-	9 H. 31 Min.	
End	-	10 H. 24 Min.	
Duration	-	1 H. 46 Min.	

This Eclipse will be invisible to us, but in the western Parts of America, both North and South, it may be seen. The Inhabitants of East and West Florida, the Havanna, and Jamaica, may observe the Beginning of it; but the Pleasure of viewing the whole is reserved for the Astronomers of the Sandwich and Friendly Islands, New Zealand, Yedso, Japan, New Holland, and the Phillippine Isles. I shall only here add that the Digest eclipsed will be 2 Deg. 54 Min. on the Moon's Northern Limb.

The Second will be an Eclipse of the Sun, which will happen on Sunday the 24th of May, at 20 Min. past 10 in the Evening. This although invisible to us, will be a central Eclipse on the Meridian, at 18 Min. past Ten, in the Longitude of 54°. 29' West, and Latitude of 11°. 14' South of Greenwich Observatory.

The Third will be a partial and visible Eclipse of the Moon, provided the Air permits—not else for the World.—As no Son of Urania would wish a Cloud in the Way;—why—mind you now I'm speaking logically. I say why should they wish it out of the Way,—Let us lay this Matter out in somewhat like a Syllogism:

I wish there may be no Clouds—

The Lord sends Clouds when he pleases—

Would you wish the Lord to alter his Pleasure for yours? Now whether this be a Syllogism in *Barbara, C. Celarent*, or what other Term it bears; Heaven is my judge, I cannot tell you;—but I know it is Truth and good Sense, which is more than all their Terms put together.

This with a Type of the same take as follows.



Beginning, Nov. 2d. at 11 H. 27 m. Night
 Middle; - Nov. 3d at 6 32 m. Morn.
 End - - - 1 36 Morn.
 Duration - - - 2 9
 Digits eclipsed 3 Deg. 40 Min. on the
 Moon's Southern Limb.

This will be a visible Eclipse to all the Inhabitants of Europe and Africa, and the Western Parts of Asia, together with the Eastern Parts of America; but in the Eastern Parts of Asia, China, Siam, Chinese Tartary, &c, the fore Part of it will only be seen.

The Fourth, and last for this Year, will be an Eclipse of the Sun, which will happen on Tuesday the 17th of Nov. at 29 Min. past Three in the Morning.

This although an invisible Eclipse to us, will be visible in China, and the Eastern Parts of Great Tartary; likewise Japan and Yedso.

The Sun will be centrally Eclipsed on the Meridian at 22 Min. past Three in Long. 129 Deg. 31 Min. East, and Lat. 14 Deg. North of Greenwich Observatory.

There will likewise in the Course of this revolving Year be a remarkable Transit of the Planet Mercury over the Sun's Disc. of which take the following Calculation.



Beginning Nov. 5th 1 hour 10 Min
 P. M. & Lat. 9° 20' South.
 Ecliptic Conjunction 3 - 30
 Middle of the Transit 3 - 37
 Sun sets - - - 4 - 39
 End - - - 6 - 4
 Total Duration - 4 - 54

This Transit will be visible in England till Sunset; and the latter Part will be seen at the Cape Verd and Canary Isles, the Azores, Iceland, Greenland, and to the North and North West as far as Baffin's Bay.

Thus you have two serious Pages upon a sublime Subject, which my dear Lady has read over with a Tear of Joy in her Eye, while she is thankful in her Heart, that she has lived to see a Thing which she never expected.

SNIP'S POEM, as promis'd in our *Observations* for December.

YOU know as well as I, in Days of Old,
 As we by ancient History are told;
 When this Church had a Leg, and that, forsooth,
 An Arm, a Scull, or else perhaps a Tooth,
 Of some right precious Saint; the Touch of which,
 Could cure the Plague, the Gout, or Pox, or Itch.
 Carver's were then employ'd each Shrine to grace,
 And Images were fix'd in ev'ry Place.
 Date we our Tale from hence, and next descry
 A Parish Meeting, and the Reason why.

Within an antique Temple long had stood
 As good a God as e'er was made of Wood;
 But now with Age grown worm eaten and rotten,
 They thought it Time the God should be forgotten;
 Some said moreover—(though the Thought was wildish)
 As he's so very old, he must be childish.
 For this the Wardens would a Vestry call,
 Whether to know (as this was fit to fall)
 They'd have a new God, or no God at all.

Here they all agreed, it would be very odd,
 For them to have a Church, and ne'er a God.
 One must be got.—But first the Gentry said for
 A Certainty as this God must be paid for,
 Out of a Parish Rate to be assess'd,
 They would by no Means have the Poor oppress'd.
 They therefore thought their Business was to take
 The cheapest God that any Man would make.

Then started up a Tradesman, hight Ezek'el,
 Who dealt in Candles, Nails, and Oil, and Treacle,
 There is said he within this Parish here,
 One that will do this Job, and not be dear,
 And let's directly send the Sexton to him;
 It's such a One the Joiner; you all know him.
 I'm very sure he'll do it to a T.
 I know the Man;—he buys his Nails of me.

Here, said a Butcher—Hark ye Friend, between us,
Ere he be sent for.—Has that Man a Genius?

Z—ds cry'd Ezekiel in a Passion hurld,
I'll bring a Proof of that against the World.
He owes me Shillings now above a Score,
And Genius you know is always poor.

And here a Tailor spoke—said he, that's flat,
And I myself can witness bear to that:
I'll tell you likewise how I came to know it;
I made a Pair of Breeches for a Poet,
And I've his Bill at Home unpaid will shew it.
But what in this Affair he did propose,
Was that he wish'd to make the God some Clothes.
Howe'er he wish'd no Benefits to reap,
For he would make his Garments very cheap;
From Remnants, he would make him such a Shiner,
There's not a God in these Dominions finer.

Blood,—says a Draper,—Is it thus you hatch work;
D'ye think to fob us with a God of Patchwork?
No, no,—I'll see his Clothing neat and fine is;
The God shall have as good a Coat as mine is.
To that I'll promise for myself to see;
None of your Merry Andrew Gods for me.

A Mercer said he'd find the God a Shirt,
And let the Parish have it cheap as Dirt.

A Barber said—to make the God look big on
High Festivals he needs must have a Wig on,
He thought of making a full bottom'd high Wig;
But if they pleas'd, the God should have a Tye Wig.

A Wig he sure must have; and over that,
A Hatter said, the God must have a Hat.
Yes, said a Hoffer,—and I will make bold
To say his Stockings should be clock'd with Gold.

A Tanner, who as yet had never spoke,
Now rose, and gravely thus he Silence broke;
The Argument which chiefly he rely'd on,
Was here as now, the God should have a Hide on;

And

And all that he propos'd was only whether
They would agree upon what Sort of Leather.

'Twas here a Shoemaker lift up his Voice,
Seal Skins he said were best; and he had choice.
No, said a Fishmonger, we'll have no Seal Skins,
Be rul'd by me, and make his Hide of Eel Skins.
Stay, said the Wardens—not without some Laughter;
First raise the God—We'll talk of clothing after.
To this they all agreed, no more was said;
The Joiner sent for, and a Bargain made,
To bring his Work in, too, a Day was set;
The Day arriv'd, and all the People met,
To see the new made God each was in Flame,
The Church was crowded, and the Joiner came;
The God produc'd.—But, on his first appearing,
Such was the laughing, hissing, cursing, swearing,
That ne'er was known such jarring, groaning, shouting,
Since wrangling Mobs first learnt the Art of Shouting.

However, all the Joiner had to say for't
Was this;—he'd made the God—and they must pay for't.
They bade him take again his Log of Wood;
He swore he would not, and they swore he shou'd.

The Warden, apprehensive of a Riot,
(To clear the Church, and keep the People quiet)
Thus spoke.—My Friends and Neighbours all; my Trust is
You'll go and order this before a justice;
And not stay wrangling here from Morn till Night,
But let his Worship set the Matter right,
To this Advice the People all agree:
Then turning to the Sexton:—Go, said he,
And say that we depend upon his Wisdom,
To view the God, and tell the Joiner his Doom.
Within the Pith, very near the Place,
There dwelt a Justice with unmeaning Face;
Upon whose Brow dwelt a majestic Scowl
Like that of Bird of Pallas—call'd an Owl.
A Man he was, who with a large Affrontment
Of Dulness, pass'd for one of grave Deportment.
His Countenance had much the heavy Look
Of weary Student nodding o'er his Book;

Or Parish Clerk, when giving out a Stave,
Or melancholy o'er a new made Grave.

To him the Sexton did his Tale relate,
And that the Parish meant on him to wait;
And to avoid all Clamour and Division,
They all resolv'd to stand by his Decision.
His Worship of his Consequence right big
Slip'd on his furred Gown, and Sunday Wig;
Then squeez'd into a two arm'd Chair (scarce able
To hold him) fix'd behind a large square Table;
Two Bottles and two Glasses standing thereon,
And the four Gospels not to read, but swear on;
And thus equipp'd, he sat by Law appointed
High Representative of God's Anointed.

And now behold his Worship sit in State,
Hearing the Parish all their Grievs relate.
The first who spoké complain'd his Size was stinted,
A second he was crook'd; a third he squinted.
It was a Crabtree God.—The Joiner spoké,
And swore the God was made of Heart of Oak.
The Warden said, he knew not what the Tree was,
The God was no more like a God than he was.

The Justice who in former Part of Life,
Had had some Dealings with the Joiner's Wife,
In this Affair humanely set his Heart
Kindly to plead his Cause, and take his Part.
Cry'd mind what I say—When you go to tax Work
Of Wood;—you can't expect a piece of Waxwork.
Why I—I know the Law.—I don't know carving;
But this I know—I see the Fellow's starving.
He's done his Work.—You own the Bargain made;
He must,—Oh yes the Fellow must be paid.
Then this might be to him a Piece of odd Work;
Perhaps (poor Man) he is not us'd to God-work.
Though now I needs must tell ye, for a Wood God,
Methinks it seems a tolerable good God:
And if you think it for a God too small;
Call it a Godling—that will salve up all.
However—Stay.—Yes, this I will maintain
(John, fill the Glass and let me drink again.)

A Silence here ensu'd for Minutes four,
 Some Authors say; though others say 'twas more.
 While he seem'd pondering, and fix'd his Eyes
 Now on his Liquor, then toward the Skies;
 And look'd so wondrous wisely o'er his Drink,
 A Stranger would have sworn the Thing could think:
 Then drinking off his Glass, he Silence broke,
 And thus in magister'el Tone he spoke.

I will maintain in this here Case, said he,
 You all did mighty well to come to me;
 I must confess I hold it much more wise
 Than bringing on a Tryal at the Assize:
 'Tis better far;—better on ev'ry Score,
 For Law is chargeable, the Fellow poor.
 Call Silence there.—John Freightway call'd out Silence,
 With Voice so loud, it might be heard a Mile thence.
 Then spoke his Worship with a Look profound,
 And very gravely cast his Eyes around,
 Now mark me well what I intend to do;
 I neither mean to hurt the Man nor you.
 The Man must have his Money for his Labours;
 Oh! pay the Man his Due, and live like Neighbours;
 As to the God—If 'tis not to your Will,
 It very well may serve for something still.
 You know—(He paus'd—and, as the Story goes,
 Pull'd out his Handkerchief, and blow'd his Nose;
 Then to the Joiner with a Look severe,
 Hark you, said he—you carving Fellow there:)
 You know we read of Beings good and evil;
 What will you take to make this God a Devil?
 Can you make One?—I can upon my Life, Sir.
 What will you make it by?—Quoth he, my Wife, Sir.
 Let them but pay me now just what they ought,
 And then I'll make a Devil on't for nought.

Why Neighbours (said the Justice) I declare,
 Upon my Soul, the Man speaks very fair;
 I say the Word—deny it now who dare.
 Here, take the God away, and see you do't,
 Make him all o'er as black as Hell with Soot;
 His Forehead you a Pair of Horns must nail on,
 And hark you, Friend—beseure you clap a Tail on;

Fix to his Legs a Pair of cloven Feet,
 And bring it to Mr Worsnip here to see't.
 The Joiner went, and quickly made by Odds,
 The best of Devils of the worst of Gods.

And now behold, the People all amaz'd,
 At what, as God they hated stood and gaz'd;
 And all admiring as a Devil prais'd.
 The Churchwarden on seeing this relented,
 Paid down the Cash, and all were well contented.
 Cry'd with what Skill his Worship weigh'd the Cause;
 Extoll'd his Wisdom much, and humm'd Applause.
 Aye (said the Justice) now you see it fine is,
 To have among you such a Head as mine is.
 Go clear the Halls; bid Susan bring my Cap;
 I'll drink my Bottle off, and have a Nap.

Then to the Joiner, who was still in View,
 Come back, said he—I want to speak to you,
 Now learn Instruction from a Man of Letters,
 And mind in future how you serve your Betters.
 As to this God:—this Devil here I mean,
 (For surely such a God was never seen.)
 I stood your Friend, because I saw you stare'd;
 But had it been an ALDERMAN you'd cur'd,
 As I'm alive, no Money should have bail'd you;
 But spite of all your Friends, I should have jail'd you.

OBSERVATIONS on the FOUR QUARTERS.

THE Spring Quarter commences on the 20th Day of March, at 3 Hours, 53 Min. in the Morning, when the bright God of Day, mounted upon a Ram visits the Northern Hemisphere, and in a few Weeks gallops off to a Bull-baiting: After this, he pays a friendly Visit to two twin Brothers, after which Spring retires, and Summer takes Place.

The Summer Quarter begins on the 21st Day of June at 1 Hour, 55 Min. in the Morn; in the first Part of which he will be decently employ'd in the delicate Diversion of Crab Hunting; in the Middle Part he will engage with a Lion; when having prov'd his Strength; he proudly walks forth, and spends it upon a Maid. Upon leaving her; Summer retires, and Autumn advances.

The Autumnal Quarter commences on the 22d Day of September at 3 Hours, 18 Min. in the Afternoon, when Phoebus taking the Balance in his Hand, finds that Days and Nights—A Lawyer's Honesty, and a Miser's Charity—A Bawd's Modesty, and a Hypocrite's Religion, exactly balance each other: While a Wife, a Drachm too light, makes the Heart of her Husband a Poand too heavy.—The middle Part of this Quarter he will be employ'd in searching for Scorpions, and the latter Part in admiring the Dexterity of an Archer. Autumn then bids adieu, and Winter takes Place.

Winter advances on the 21st Day of December at 7 Hours, 59 Min. in the Morning, and finds the God mounted upon a Goat; when after a Month's riding, a Month's feasting with the celestial Pot-bearer, and a Month's fishing in the Great South Sea, he promises to visit the Northern Regions again. But as he is now gallop'd so far that we can scarce come at the Sight of him, I here wish the God and the Goat a good Journey.

* The Year concludes—The God has run His Race—
Still he proceeds, nor slacks his wonted Pace;
And now with Snow the Fields are whiten'd o'er;
Round the rude Heath the bustling Tempests roar.
No more the Streams in sweet Meanders stray,
But dusky Clouds obscure the Face of Day.
Thus like the Star is Man when he grows old,
With Snowy Hairs, Eyes dim, and Blood runs cold;
He pants, he struggles, and in fine,
Departs, as does the Year of Eighty Nine.

Speculum Anni :
O R,
SEASON on the SEASONS,

For the Year of our LORD 1789,

BEING THE FIRST AFTER
BISSEXTILE, OR LEAP YEAR.

Wherein you will find all Things necessary
for such a Work ; Sun and Moon's Rising and Setting ;
Moon's Southing, Planets Places and Aspects, Eclipses,
Judgments on the Weather, and Four Quarters ;
Remarks about the Sun, Monthly Poetry, and other
Novelties.

By HENRY SEASON,
LICENSED PHYSICIAN,
And Student in the Celestial SCIENCES, near DEVIZES.
With a particular Judgment of the Eclipses, &c.

*Omnis donatio bona, & omne interest bonum
Est superne descendens à patre lucis, &c.* 1. 17.

God hath granted me to speak according to my Mind, and to judge
worthily of the Things that are given me ; for he is the Leader
unto Wisdom, and the Director of the Wise : How the Times
alter, the Change of the Seasons, the Course of the Year, and the
Situation of the Stars. *Wisd. chap. vii. ver. 15, 19.*

The sacred Fiat! no sooner nam'd,
But Heav'n with all its Hosts were fram'd;
Phœbus display'd his fiery Car,
And Wisdom marshall'd ev'ry Star;
Six Worlds around the Sun did glide,
He gave their Light, and Motions guide;
By secret, fix'd, attractive Laws,
They all confess th' Almighty Cause.

The AUTHOR's Fifty-sixth Impression.

L O N D O N :

Printed for the COMPANY of STATIONERS,
and sold by ROBERT HORSFIELD, at their Hall, in Ludgate-street.

[Price NINE-PENCE stitched.]

The common Notes for the Year 1789.

The Golden Number - - 4	Shrove-Sunday - - Feb. 22
The Epact - - - - 3	Ash-Wednesday - - - 25
The Cycle of the Sun - - 6	Easter-Day - - Apr. 12
Dominical Letter - - D	Whit-Sunday - - - May 31
Roman Indiction - - - 7	Advent-Sunday - Nov. 29
Septuagesima Sunday Feb. 8	Sundays after Trinity - - 24

The 12 Signs.

♈ Aries
♉ Taurus
♊ Gemini
♋ Cancer
♌ Leo
♍ Virgo
♎ Libra
♏ Scorpio
♐ Sagittary
♑ Capricorn
♒ Aquarius
♓ Pisces

The 7 Planets, and the Aspects.

☉ Sun
☾ Moon
♄ Saturn
♃ Jupiter
♂ Mars
♀ Venus
☿ Mercury
♌ Conjunction
* Sextile
□ Square
△ Trine
♌ Opposition

The four Quarters of the Year.

		d	h	m	
Spring Quarter begins - - -	March	20	3	53	Morn.
Summer Quarter begins - - -	June	21	1	55	Morn.
Autumn Quarter begins - - -	Sept.	22	3	28	Aftern.
Winter Quarter begins - - -	Dec.	21	7	59	Morn.

Venus is a Morning Star till May 20, and then an Evening Star for the rest of the Year.

Jupiter is a Morning Star till Jan. 14, then an Evening Star till Aug. 2, and then a Morning Star for the rest of the Year.

A TABLE

A TABLE of the **KINGS** and **QUEENS** of England,
from the **CONQUEST** to the present Year 1789.

<i>Names of Kings.</i>	<i>Born Ann.</i>	<i>When Began to reign.</i>	<i>Reign. Y. M.</i>	<i>Since their Reign ended.</i>	<i>Buried at</i>
William 1	1029	1066, Octob. 14	20 11	702, Septem. 9	Caen, Nor.
William 2	1057	1087, Sept. 9	12 11	689, August 2	Winchest.
Henry 1	1068	1100, Aug. 2	35 4	654, Decemb. 1	Reading.
Stephen	1105	1135, Dec. 1	18 11	635, Octob. 25	Feverham

The Saxon Line Restored.

Henry 2	1133	1154, Oct. 25	34 8	600, July 6	Fontevr.
Richard 1	1156	1189, July 6	9 9	590, April 6	Fontevr.
John	1165	1199, April 6	17 6	573, Octob. 19	Worcester
Henry 3	1207	1216, Oct. 19	56 1	517, Nov. 16	Westmin.
Edward 1	1239	1272, Nov. 16	34 8	482, July 7	Westmin.
Edward 2	1284	1307, July 7	19 7	462, Jan. 25	Gloucester
Edward 3	1312	1327, Jan. 25	50 5	412, June 21	Westmin.
Richard 2	1366	1377, June 21	22 3	390, Sept. 29	Westmin.

The Line of Lancaster.

Henry 4	1367	1399, Sept. 29	13 6	376, March 20	Canterb.
Henry 5	1389	1413, Mar. 20	9 5	367, August 31	Westmin.
Henry 6	1421	1422, Aug. 31	38 6	328, March 4	Windfor

The Line of York.

Edward 4	1442	1461, Mar. 4	22 1	306, April 9	Windfor
Edward 5	1471	1483, April 9	0 2	306, June 22	Unknown
Richard 3	1442	1483, June 22	2 2	304, August 22	Leicester

The Families United.

Henry 7	1456	1485, Aug. 22	23 8	280, April 22	Westmin.
Henry 8	1492	1509, April 22	37 9	242, Jan. 28	Windfor
Edward 6	1537	1547, Jan. 28	6 5	236, July 6	Westmin.
Qu. Mary	1516	1553, July 6	5 4	231, Nov. 17	Westmin.
Qu. Eliz.	1533	1558, Nov. 17	44 4	186, March 24	Westmin.

The Union of the Two Crowns.

James 1	1566	1603, Mar. 24	22 0	164, March 27	Westmin.
Charles 1	1600	1625, Mar. 27	23 10	140, Jan. 30	Windfor
Charles 2	1630	1649, Jan. 30	36 0	104, Feb. 6	Westmin.
James 2	1633	1686, Feb. 6	4 0	100, Feb. 13	S. Germain
Will. & Mary	1650	1689, Feb. 3	13 1	87, March 8	Westmin.

The Union of the Two Kingdoms.

Qu. Anne	1665	1702, Mar. 8	12 5	75, August 1	Westmin.
George 1	1660	1714, Aug. 1	12 10	62, June 11	Hanover
George 2	1683	1727, June 11	33 4	29, Oct. 25	Westmin.
George 3	1738	1760, Oct. 25		Crowned Sept. 22, 1761.	

A TABLE of TERMS and their RETURNS.

Hilary Term begins January 23, ends February 12.

Returns or Effoign-Days.				E	R	A	W	D
In eight Days of St. Hilary,	-	-	Jan. 20	21	22	23	Frid.	
In 15 Days of St. Hilary	-	-	27	28	29	30	Frid.	
On the Mor. of the Purificat. of B.V.M.	Feb. 3	4	5	6	Frid.			
In eight Days of the Purificat. of B.V.M.	-	9	10	11	12	Thu.		

Easter Term begins April 29, ends May 25.

In 15 Days of Easter	-	-	April 26	27	28	29	Wed.	
From Easter in 3 Weeks,	-	-	May 3	4	5	6	Wed.	
From Easter in 1 Month,	-	-	10	11	12	13	Wed.	
From Easter in 5 Weeks,	-	-	17	18	19	20	Wed.	
On the Morrow of the Ascension-day,			22	23	24	25	Mon.	

Trinity Term begins June 12, ends July 1.

On the Morrow of the Holy Trinity,	June 8	9	10	12	Frid.		
In eight Days of the Holy Trinity,	14	15	16	17	Wed.		
In 15 Days of the Holy Trinity,	-	21	22	23	24	Wed.	
From the Day of the Holy Trin. in 3 W.	28	29	30	1	Wed.		

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the Morrow of All Souls,	-	-	Nov. 3	4	5	6	Friday	
On the Morrow of St. Martin,	-	-	12	13	14	16	Mon.	
In eight Days of St. Martin,	-	-	18	19	20	21	Satur.	
In 15 Days of St. Martin,	-	-	25	26	27	28	Satur.	

N. B. No-Sittings in Westminster-Hall on Ascension-Day, Midsummer-Day, and the 2d of February.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but four Days.

Note, The first and last Days of every Term are the Days of Appearance.

A CATALOGUE of the Most Reverend, Right Reverend, and Reverend, the Archbishops, Bishops and Deans, exercising Ecclesiastical Jurisdiction in England, 1789.

Archbishops.	Deans Names.	Names of the Sees.
Dr. John Moore	Dr. George Horne	Canterbury
Dr. Wm. Markham	Dr. John Fountayne	York
Bishops.		
Dr. Beilby Porteus.	Bp. Pretyman	London
Dr. Thomas Thurlow	Bp. Hinchliffe	Durham
Hon. D. Brownl. North	Dr. Newton Ogle	Winchester
Sir Wm. Ashburnham	Dr. Charles Harward	Chichester
Dr. Charles Mofe	Lord Francis Seymour	Bath and Wells
Dr. Jonathan Shipley	Mr. W. Shipley	St. Asaph
Hon. Dr. S. Barrington	Dr. John Ekins	Salisbury
Dr. John Hinchliffe	Dr. Charles Tarrant	Peterborough
Hon. Dr. James Yorke	Dr. William Cooke	Ely
Dr. John Thomas	Dr. Thomas Dampier	Rochester
Dr. Richard Hurd	Dr. St. John	Worcester
Dr. John Butler	Dr. Nat. Wetherell	Hereford
Dr. John Rois	Dr. Buller	Exeter
Dr. John Warren	Dr. Thomas Lloyd	Bangor
Hon. Dr. Ja. Cornwallis	Dr. Baptist Proby	Lichfield and Coventry
Dr. Samuel Halifax	Dr. Josiah Tucker	Gloucester
Dr. Lewis Bagot	Dr. Philip Lloyd	Norwich
Dr. Richard Watfon	Dr. Adams, Archdeac.	Llandaff
Dr. Edward Smalwell	Dr. Jackson	Oxford
Dr. Christopher Wilson	Dr. John Hallam	Bristol
Dr. William Pretyman	Dr. Rich. Kaye	Lincoln
Dr. John Douglas	Dr. Jeff. Ekins	Carlisle
Dr. Wm. Cleaver	Dr. George Cotton	Chester
Dr. Sam. Horsley	Mr. F. Wollaston, Prec.	St. David's
	Bp. Thomas	Westminster
	Bp. Douglas	Windsor
		Sodor and Man
Dr. Claud. Crigan		

The Names of the Learned Judges in the Law.

- I. Right Hon. Lord Thurlow, Lord High Chancellor.
 Sir Arch. M'Donald, Knt. Attor. Gen. Sir John Scott, Knt. Sol. Gen.
- II. In the { Rt. Hon. Lord Kenyon, L. C. J. Fran. Buller, Esq.
 K. Bench. { Sir Wm. Henry Ashurst, Knt. Sir N. Grose, Knt.
- III In the { Rt. Hon. Al. Lord Loughborough, L. C. J. John Heath, Esq.
 Co. Pleas. { Sir H. Gould, Kt. Sir J. Wilson, Kt.
- IV. In the { Sir James Eyre, Knt. L. C. B. Sir Rich. Perryn, Knt.
 Exchequer. { Sir Beaumont Hotham, Knt. Sir Alex. Thomson, Knt.

A TABLE shewing the Moon's Southing for Farmers and others that breed Cattle, but men and others that sail on the Water.

M D	Jan. h m	Feb. h m	Mar. h m	April h m	May h m	June h m	M D
1	3 a 40	4 a 19	3 a 5	4 a 38	5 a 27	6 a 52	1
2	4 22	5 6	3 54	5 34	6 21	7 43	2
3	5 3	5 56	4 45	6 30	7 13	8 34	3
4	5 46	6 49	5 39	7 26	8 5	9 26	4
5	6 32	7 46	6 35	8 21	8 57	10 20	5
6	7 21	8 45	7 33	9 15	9 49	11 14	6
7	8 14	9 46	8 31	10 8	10 43	morn	7
8	9 11	10 45	9 28	11 2	11 38	0 8	8
9	10 10	11 43	10 25	11 57	morn	1 1	9
10	11 13	morn	11 20	morn	0 33	1 52	10
11	morn	0 40	morn	0 52	1 28	2 41	11
12	0 13	1 34	0 15	1 47	2 22	3 27	12
13	1 11	2 27	1 9	2 43	3 14	4 10	13
14	2 7	3 2	2 4	3 38	4 4	4 52	14
15	3 0	4 13	2 59	4 31	4 51	5 33	15
16	3 52	5 6	3 54	5 21	5 36	6 15	16
17	4 42	5 58	4 48	6 9	6 19	6 58	17
18	5 32	6 50	5 40	6 55	7 0	7 43	18
19	6 23	7 41	6 3	7 39	7 42	8 30	19
20	7 14	8 30	7 2	8 21	8 25	9 21	20
21	8 5	9 18	8 7	9 3	9 9	10 15	21
22	8 56	10	8 52	9 45	9 56	11 11	22
23	9 46	10 47	9 35	10 28	10 45	0 a 9	23
24	10 35	11 29	10 17	11 13	11 37	1 7	24
25	11 22	0 a 11	10 59	0 a 1	0 a 32	2 4	25
26	0 a 6	0 53	11 41	0 52	1 29	2 59	26
27	0 48	1 35	0 a 25	1 45	2 26	3 52	27
28	1 30	2 19	1 11	2 40	3 22	4 43	28
29	2 11		1 59	3 36	4 17	5 34	29
30	2 53		2 50	4 32	5 10	6 25	30
31	3 55		3 43		6 1		31

all the Months of the Year, very necessary for all
especially and more worthy of Notice to Water-

M D	July h m	August h m	Sept. h m	Oct. h m	Nov. h m	Dec. h m	M D
1	7 a 18	8 a 43	10 a 0	10 a 19	11 a 12	11 a 25	1
2	8 9	9 34	10 44	11 0	11 59	morn	2
3	9 2	10 23	11 27	11 42	morn	0 17	3
4	9 56	11 10	morn	morn	0 48	1 11	4
5	10 49	11 56	0 10	0 26	1 39	2 6	5
6	11 40	morn	0 52	1 11	2 31	3 0	6
7	morn	0 40	1 34	1 58	3 24	3 53	7
8	0 29	1 22	2 18	2 47	4 17	4 44	8
9	1 16	2 4	3 4	3 38	5 10	5 35	9
10	2 0	2 46	3 52	4 31	6 3	6 25	10
11	2 43	3 29	4 42	5 25	6 55	7 17	11
12	3 25	4 13	5 35	6 20	7 47	8 8	12
13	4 6	5 c	6 29	7 14	8 39	9 2	13
14	4 48	5 49	7 25	8 8	9 32	9 57	14
15	5 31	6 41	8 21	9 2	10 27	10 53	15
16	6 16	7 36	9 17	9 56	11 24	11 50	16
17	7 4	8 32	10 13	10 50	0 a 21	0 a 44	17
18	7 56	9 30	11 8	11 46	1 18	1 36	18
19	8 51	10 28	0 a 4	0 a 44	2 14	2 25	19
20	9 48	11 25	1 1	1 42	3 8	3 11	20
21	10 47	0 a 22	1 57	2 39	3 58	3 55	21
22	11 46	1 18	2 54	3 35	4 45	4 37	22
23	0 44	2 13	3 50	4 29	5 30	5 18	23
24	1 39	3 7	4 45	5 20	6 13	6 0	24
25	2 33	4 1	5 39	6 8	6 55	6 42	25
26	3 26	4 56	6 31	6 54	7 36	7 26	26
27	4 18	5 51	7 21	7 38	8 18	8 12	27
28	5 11	6 44	8 8	8 20	9 1	9 1	28
29	6 4	7 36	8 53	9 2	9 47	9 52	29
30	6 57	8 26	9 37	9 44	10 35	10 46	30
31	7 50	9 14		10 27		11 42	31

8 JANUARY hath xxxi Days.

M	h	2
D	X	25
1	7	27
6	7	26
11	8	25
16	8	25
21	9	24
26	9	23

First Quarter the 4th day, at 4 in the afternoon.
 Full Moon the 11th day, at 6 in the afternoon.
 Last Quarter the 18th day, at 9 in the morning.
 New Moon the 26th day, at 6 in the morning.

M	W	Remarkable	☉	D lon-	D riles	♂	♀	☿	Mut. Aspects
D	D	Days, &c.	h	gitude	and sets	h	z	z	and Weather.
1	T	Circumcision	12	6 X 31	9 a 36	11	5	29	
2	F		13	18 25	10 41	11	7	25	☐ h
3	S		14	0 Y 25	11 46	12	8	2	Snow or cold
4	D	2 S aft. Chr.	15	12 37	morn	13	9	3	Rain.
5	M	Old Christ. d.	16	25 5	0 54	14	10	5	
6	T	Epiphany	17	7 8 53	2 4	14	12	6	Tw. d. * h ♀
7	W		18	21 6	3 14	15	13	8	
8	F	Lucian.	19	4 14 46	4 25	16	14	9	Heavy Air,
9	F		20	18 5	5 30	17	15	11	and Tempe-
10	S		21	3 25 30	6 26	17	16	13	stuous.
11	D	1 S. aft. Epiph.	22	18 26	D riles	18	18	14	
12	F	Plow Mond.	23	3 2 36	5 a 42	19	19	16	
13	T	Hilary.	24	18 48	7 8	20	20	17	Cam. T. beg.
14	W	Ox. T. begins	25	3 2 53	8 31	21	21	19	8 ☉ 4
15	T		26	18 41	9 53	21	23	21	6 ♂ ♀
16	F		27	3 2 7	11 13	22	24	22	Moderate.
17	S	O. Twelfth-d	28	17 7	morn.	23	25	24	8 4 ♀
18	D	2 S. aft. Epiph.	29	0 m 41	0 30	24	26	25	Qu. C. b. d. k.
19	M		30	13 51	1 45	24	28	27	8 4 ♂ [Prif.
20	T	Fabian.	1	26 41	2 55	25	29	29	
21	W	Agnes	2	9 14	3 58	26	30	30	
22	T	Vincent.	3	21 33	4 52	27	1	2	Unsettled.
23	F	Hil. Ter. beg	4	3 14 44	5 38	28	2	4	6 ☉ ♀
24	S		5	15 47	6 17	28	4	6	
25	D	3 S. aft. Epiph.	6	27 45	6 48	29	5	7	Com. St. Paul
26	M		7	9 39	D sets	30	6	9	
27	T	P. Aug. Fr. b.	8	21 32	6 a 14	30	7	11	Variable
28	W		9	3 X 24	7 17	1	9	13	* h ♀
29	T		10	15 16	8 21	2	10	14	
30	F	K. Ch. I. mar.	11	27 12	9 25	3	11	16	Weather.
31	S		12	9 Y 13	10 32	4	12	18	

Now Winter spreads his wide domain,
 And Clouds obscure the Sky ;
 The blustering Storms, th' impending Rain
 Around tempestuous fly.
 While Hills and Vales, once pleasing to the Sight,
 Benumb'd with Frost, are cloth'd in chilling White.

M. \odot rises. \odot sets

D h m h m

1	8	43	56
2	8	43	56
3	8	33	57
D 8	23	58	
5	8	23	58
6	8	13	59
7	8	04	0
8	7	59	1
9	7	58	2
10	7	57	3
D 7	56	4	
12	7	55	4
13	7	54	5
14	7	53	6
15	7	52	7
16	7	50	8
17	7	49	9
D 7	47	4	10
19	7	46	11
20	7	45	12
21	7	43	13
22	7	42	14
23	7	40	15
24	7	39	16
D 7	37	4	17
26	7	36	18
27	7	34	19
28	7	33	20
29	7	31	21
30	7	29	22
31	7	28	23

O B S E R V A T I O N S.

The great End of natural and experimental Philosophy, being to inspire us with grateful Adoration of that Supreme Being, whose wonders are past finding out, and whose tender mercies are over all his works. I thought I could not more properly introduce this my annual Performance into the World, than by ushering it in with an elegant Poem, from the Pen of that truly learned and pious Divine, the ingenious Dr. Watts. And if by his means I make the World acquainted with a Piece fraught with sublime ideas, and the most beautiful Imagery ; and calculated at once to mend both the Head and the Heart; especially as I think it is now in few Hands ; I hope the serious and contemplative Part of my Readers, which I flatter myself I may without vanity call the major Part, will not think the following an Intrusion, but rather an Embellishment to this Work.

In a former Ephemeris I remember I began my Observations in the Monthly department, with an Extract from the Abovementioned ; which was kindly received, and which indeed was all I then knew of it : but the Whole having lately fallen into my Hands, I thought I could do my Readers no better service than by introducing it to their Acquaintance, and which I desire them to accept without any further Apology.

Hymn

10 FEBRUARY hath xxviii Days.

M	h	4
D	X	2
1	10	23
6	11	21
11	11	21
16	12	21
21	12	21
26	13	20

First Quarter the 3^d day, at 9 in the morning.
 Full Moon the 10th day, at 4 in the morning.
 Last Quarter the 16th day, at 10 at night.
 New Moon the 23th day, at 1 in the morning.

M	W	Remarkable	☉	D lon-	D rises	♂	♀	☿	Mut. Aspects
D	D	Days, &c	☿	gitude	and sets	☿	♂	☿	and Weathe.
1	D	4 S. of Epiph.	13	21 24	11 a 41	5	14	20	
2	M	Candlemas D.	14	3 8 47	morn	5	15	21	Purificat.
3	T	Blaise	15	16 29	0 49	6	16	23	Windy, and
4	W		16	29 33	1 56	7	17	25	some wet.
5	T	Agatha.	17	13 11 3	3 4	8	18	27	
6	F		18	27 2	4 4	9	20	29	
7	S		19	11 30	4 55	9	21	X	8 24 ♀
8		Septuagesima	20	26 24	5 39	10	22	2	
9	M		21	11 38	6 14	11	23	4	Variable.
10	T		22	27 0	D rises	12	25	6	
11	W		23	12 19	7 a 18	12	26	7	
12	T	Hil. Ter. ends	24	27 25	8 43	13	27	9	
13	F	Old Candlem.	25	12 6	10 4	14	28	11	♂ h ♀
14	S	Valentine	26	25 20	11 22	15	30	12	
15	D	Sextagesima	27	10 3	morn	16	☿	14	
16	M		28	23 17	0 38	16	2	15	Snow or rain.
17	T		29	6 7	1 44	17	3	17	
18	W		0	18 36	2 41	18	5	18	
19	T		1	0 50	3 31	19	6	19	
20	F		2	12 53	4 14	20	7	20	Δ 24 ♀
21	S		3	24 49	4 49	20	8	21	
22	D	Quinquages.	4	6 41	5 16	1	10	22	
23	M		5	18 32	5 41	2	11	23	Shrove Sun.
24	T	St. Matt. S. Tu.	6	0 X 24	6 1	3	12	24	Unsettled,
25	W	Ash-Wednes.	7	12 18	D sets	3	13	24	Pr. Ad. Fr. b.
26	T		8	24 15	7 a 18	4	14	25	and so con-
27	F		9	6 17	8 25	25	15	24	tinues.
28	S		10	18 25	9 32	26	17	R	

Rivers in Icy Fetters bound,
 Unwary Feet betray,
 And hardly o'er the Heath is found
 The once frequented Way.
 And Mountains higher seem to grow,
 While lab'ring under piling Mounts of Snow.

M	rises		sets	
	h	m	h	m
D	7	26	4	34
	27	24	4	36
	37	23	4	37
	47	21	4	39
	57	19	4	41
	67	17	4	43
	77	15	4	45
D	7	14	4	46
	97	12	4	48
	107	10	4	50
	117	8	4	52
	127	6	4	54
	137	4	4	56
	147	3	4	57
	157	1	4	59
	166	59	5	1
	176	57	5	3
	186	55	5	5
	196	53	5	7
	206	51	5	9
	216	4	5	11
D	6	47	5	13
	236	45	5	15
	246	43	5	17
	256	41	5	19
	266	39	5	21
	276	38	5	22
	285	36	5	24

OBSERVATIONS.

Hymn to the Great Author and Preserver
 of the Universe.

My God I love and I adore;
 But Souls that love would know thee more.
 Wilt thou for ever hide, and stand
 Behind the Labours of thy Hand?

Thy Hand unseen sustains the Poles,
 On which this huge Creation rolls;
 The Starry Arch proclaims thy Pow'r,
 Thy Peacil glows in ev'ry Flow'r.

In thousand Shapes and Colours rise,
 Thy Painted Wonders to our Eyes;
 While Beasts and Birds with lab'ring Throats,
 Teach us a God in thousand Notes.

The meanest Pin in Nature's Frame,
 Marks out some Letter of thy Name,
 Where Sense can reach, or Fancy rove,
 From Hill to Hill, from Field to Grove.

Across the Waves, around the Sky,
 There's not a Spot, or deep, or high,
 Where the Creator has not trod,
 And left the Footsteps of a God.

But

12	MARCH hath xxxi Days.	M	h	u
		D	h	u
	First Quarter the 4th day, at 11 at night.	1	13	20
	Full Moon the 11th day, at 2 in the afternoon.	6	14	20
	Last Quarter the 18th day, at 2 in the afternoon.	11	15	20
	New Moon the 26th day, at 7 in the afternoon.	16	15	20
		21	16	20
		26	16	20

M W	markable	☉	D lon-	D rises	♂	♀	♂	Mut. Aspects
D D	Days, &c	h	gitude	and sets	h	h	h	and Weather
1 D	1 S. in Lent.	11	08 42	10 a 39	2	18	24	David
2 M	Chad	12	13 9	11 48	27	19	24	
3 T		13	25 51	morn	28	21	23	♂ ☉ ♀
4 W	Ember Week	15	8 52	0 54	29	22	23	
5 T		15	22 14	1 53	30	23	22	Still variable.
6 F		16	6 1	2 46	h	24	21	
7 S	Perpetua	17	20 15	3 33	1	26	20	Δ ♀ ♀
8 D	2 S. in Lent	18	4 4	4 10	2	27	19	♂ ☉ ♀
9 M		19	19 53	4 42	3	28	18	Δ ☉ ♀
10 T		20	5 5	5 11	4	29	17	
11 W		21	20 19	D rises	4	h	16	Stormy.
12 T	Gregory	22	5 24	7 a 3	5	2	15	♂ ♀ ♀
13 F		23	20 11	9 0	6	3	15	
14 S		24	4 m 32	10 19	7	4	14	
15 D	3 S. in Lent.	25	18 25	11 33		6	13	Perhaps a-
16 M		26	1 48	morn.	8	7	12	bout this
17 T	St. Patrick	27	14 44	0 38	9	8	12	time some
18 W	Edw. K. W. S.	28	27 17	1 32	1	9	11	Frost.
19 T		29	9 33	2 16	11	10	11	♂ ♂ ♀, ♂ ♂ ♀
20 F		0	21 36	2 55	12	12	11	[♂ ♀ ♀
21 S	Benedict.	1	3 30	3 26	12	13	11	Rough and
22 D	Midlent Sun.	2	15 21	3 50	13	14	10	Stormy, and
23 M		3	27 11	4 13	14	15	11	
24 T		4	9 h 5	4 34	15	17	11	♂ ♀ ♀
25 W	Lady Day.	5	21 3	4 53	15	18	11	
26 T		6	3 7	D sets	16	19	11	♂ ♀ ♂, Δ ♀ ♀
27 F		7	15 20	7 a 31	17	20	11	
28 S		8	27 40	8 39	18	22	12	fo continues.
29 D	5 S. in Lent	9	10 10	9 52	19	23	12	
30 M		10	22 51	10 54	19	24	13	
31 T		11	5 45	11 56	20	25	14	Δ ♀ ♂

March next appears, and howling loud,
 The Tempest roars abroad ;
 While gloomy Clouds the Sunbeams shroud,
 And miry is the Road.
 Now rolling Torrents down the Mountains roar,
 And Vales with Water now are cover'd o'er.

M	☉ rises	☉ sets
D	h	m
D 6	34	5 26
26	32	5 28
36	30	5 30
46	28	5 32
56	26	5 34
66	24	5 36
76	22	5 38
D 6	20	5 40
96	18	5 42
106	16	5 44
116	14	5 46
126	12	5 48
136	10	5 50
146	8	5 52
D 6	6	5 54
166	4	5 56
176	2	5 58
186	0	6 0
195	58	6 2
205	56	6 4
215	54	6 6
D 5	52	6 8
235	50	6 10
245	48	6 12
255	46	6 14
265	44	6 16
275	42	6 18
285	40	6 20
D 5	38	6 22
305	36	6 24
315	34	6 26

OBSERVATIONS.

But are his Footsteps, all that we,
 Poor grov'ling Worms, must know or see ?
 Thou Maker of my vital Frame,
 Unveil thy Face, pronounce thy Name.

Shine to my Sight, and let the Ear
 Which thou hast form'd, thy Language hear,
 Where is thy Residence ? Oh ! why
 Dost thou avoid my searching Eye,

My longing Sense ? Thou great unknown,
 Say, do the Clouds conceal thy Throne ?
 Divide, ye Clouds, and let me see
 The Pow'r that gives me leave to be.

Or art thou all diffus'd abroad,
 Through boundless Space, a present God,
 Unseen, unheard, yet ever near,
 What shall I do to find thee here ?

Is there not some mysterious Art,
 To feel thy Presence at my Heart ?
 To hear thy Whispers soft and kind,
 In holy silence of the Mind ?
 Then rest my thoughts, nor longer roam
 In quest of Joy, for Heav'n's at Home.

But,

M	b	u
D	h	g
1	17	20
6	18	21
11	18	21
16	19	22
21	19	22
26	20	22

First Quarter the 3d day, at 8 in the morning.

Full Moon the 9th day, at 11 at night.

Last Quarter the 17th day, at 8 in the morning.

New Moon the 25th day, at 10 in the morning.

M	W	Remarkable	☉	D lon	D-rises	♂	♀	☿	Mut. Aspects
D	D	Days, &c.	☿	gitude	and sets	☿	☿	☿	and Weather
1	W		12	18 11 53	morn	21	27	15	
2	T		13	2 25 18	0	51	22	28	16
3	F	Richard	14	16 2	1	38	23	29	17
4	S	St. Ambrose	15	0 2 5	2	16	23	☿	17
5	D	Palm Sunday	16	14 27	2	50	24	1	18
6	M	[O. Lady-d	17	29 4	3	19	25	3	19
7	T		18	13 12 53	3	45	26	4	21
8	W		19	28 40	4	10	26	5	22
9	T	Maun. Thurs.	20	13 2 33	D-rises	27	6	23	
10	F	Good Friday	21	28 8	7 a 58	28	8	24	
11	S		22	12 23	9	16	29	9	25
12	D	Easter Day	23	26 15	10	26	30	10	26
13	M	Easter Monday	24	9 1 41	11	28	☿	11	28
14	T	Easter Tuesd.	25	22 42	morn	1	13	29	
15	W		26	5 21	0	19	2	14	☿
16	T		27	17 41	1	0	3	15	2
17	F		28	29 47	1	33	3	16	3
18	S		29	11 44	2	0	4	17	5
19	D	Low Sunday	30	23 37	2	24	5	19	6
20	M	[Alphege	1	5 29	2	46	6	20	8
21	T		2	17 25	3	5	6	21	9
22	W	Ox. & Ca. T. b.	3	29 27	3	24	7	22	11
23	T	St. George	4	11 40	3	45	8	24	12
24	F		5	24 3	4	6	9	25	14
25	S	St. M. P. M. b.	6	6 39	D sets	10	26	16	
26	D	2 S. aft. Easter	7	19 27	8 a 50	10	27	17	
27	M		8	2 29	9	56	11	29	19
28	T		9	15 44	10	53	12	30	21
29	W	Easter T. beg.	10	29 11	11	43	13	8	23
30	T		11	12 51	morn	13	2	24	

Cam. T. ends

Oxf. T. ends

Windy.

△ 4 ☿

□ ○ 4

Seasonable

Showers.

Pleasant

6 ☿ ☿

Weather.

□ 4 ☿

Changeable
towards the
End.

□ 4 ☿

Now Expectation wait awhile
 Though April weeps in Showers,
 The joyful Spring again shall smile,
 And Flora deck her Bowers
 In sweetest Trim, and all around be gay,
 Again to usher in the welcome May.

M	☉ rises	☉ sets
D	h m	h m
1	5 32	6 28
2	5 30	6 30
3	5 28	6 32
4	5 26	6 34
D	5 24	6 36
6	5 22	6 38
7	5 20	6 40
8	5 18	6 42
9	5 17	6 43
10	5 15	6 45
11	5 13	6 47
D	5 11	6 49
13	5 9	6 51
14	5 7	6 53
15	5 5	6 55
16	5 3	6 57
17	5 1	6 59
18	4 59	7 1
D	4 57	7 3
20	4 56	7 4
21	4 54	7 6
22	4 52	7 8
23	4 50	7 10
24	4 48	7 12
25	4 46	7 14
D	4 45	7 15
27	4 43	7 17
28	4 41	7 19
29	4 39	7 21
30	4 37	7 23

OBSERVATIONS.

But, oh! thy Beams of warmest Love!
 Sure they were made for Worlds above.
 How shall my Soul her Powers extend,
 Beyond where Time and Nature end.

To reach those Heights, thy best Abode,
 And meet thy kindest Smiles, my God,
 What shall I do? I wait thy call;
 Pronounce the Word, my Life, my All.

Oh for a Wing to bear me far
 Beyond the golden Morning Star!
 Fain would I trace th' immortal Way,
 That leads to Courts of endless Day.

There the Creator stands confess'd,
 In his own fairest Glories dress'd;
 Some shining Spirit help me, rise,
 And waft a Stranger through the Skies.

Oh kindly meet me on the Road,
 First Offspring of th' Eternal God;
 Thy Hand shall lead a younger Son,
 Clothe me with Vestures yet unknown,
 And place me near my Father's Throne.

}

It

First Quarter the 2d day, at 3 in the afternoon.

Full Moon the 9th day, at 9 in the morning.

Last Quarter the 17th day, at 2 in the morning.

New Moon the 24th day, at 10 at night.

First Quarter the 31st day, at 8 at night.

1	20	23
6	21	24
11	21	24
16	21	25
21	22	26
26	22	27

M	W	Remarkable	☉	☽	☿	♂	♀	♂	Mut. Aspects
D	D	Days, &c.	8	guide	and sets	☿	♀	♂	and Weather
1	F	S. Phil. & Ja.	11	26	23	14	4	26	
2	S		12	10	46	0	57	15	28
3	D	3 S. aft. Easter	13	24	59	1	27	16	30
4	M		14	9	20	1	53	16	7
5	T		15	23	45	2	17	17	8
6	W	John Ea. P.L.	16	8	10	2	42	18	10
7	T		17	22	30	3	7	19	11
8	F		18	6	41	3	37	19	12
9	S		19	20	36	☿	♂	13	12
10	D	4 S. aft. Easter	20	4	15	9	2	17	21
11	M		21	17	33	10	12	22	16
12	T	Ol. May-day	22	10	31	10	56	22	17
13	W		23	13	11	11	35	23	18
14	T		24	25	33	morn	24	20	23
15	F		25	7	42	0	5	25	21
16	S		26	19	41	0	29	26	22
17	D	Rogat. Sund.	27	1	35	9	51	26	23
18	M		28	13	29	1	10	27	24
19	T	Q. Charl. bo.	29	25	26	1	30	28	25
20	W		30	7	32	1	50	29	27
21	T	Ascension	1	19	50	2	11	29	28
22	F	Prs. Eliz. bo.	2	2	22	2	36	8	29
23	S		3	15	11	3	4	1	11
24	D	Sund. Ascen.	4	28	18	☿	♂	2	14
25	M	Easter T. ends	5	11	43	8	52	2	3
26	T	Augustin. Ab.	6	25	23	9	39	3	4
27	W	Ven. Bede	7	9	17	10	23	4	5
28	T	Oxf. T. ends	7	23	21	10	59	4	7
29	R	K. Ch. II. rest.	8	7	33	11	30	5	8
30	S		9	21	48	11	57	6	9
31	D	Whit.-Sunday	10	6	4	morn	7	10	28

Inv. of Crops
Fine showers

Pleasant

* ☉ ♀

♂ ♀ ♂

* ♀ ♂

♂ ☉ ♂, * ☉ ♀

* ♀ ♀, ☐ ♀ ♂

* ♀ ♂

Continues

Dunstan,

[* ♀ ♀

till towards

the end,

when expect

clouds with

hail or rain,

☐ ♀ ♂

inclined to

♂ ☉ ♀

heat.

Now with a flow'ry Carpet spread,
 How lovely looks the Ground;
 While Spring erects her blooming Head,
 And smiles on all around:
 Enchanting is the Scene where'er we rove,
 Through Fields enamell'd, or the vocal Grove.

M	☉ rises	☉ sets
D h	h m	h m

O B S E R V A T I O N S.

1	4	36	7	24
2	4	34	7	26
3	4	32	7	28
4	4	31	7	29
5	4	29	7	31
6	4	27	7	33
7	4	25	7	35
8	4	24	7	36
9	4	22	7	38
D	4	21	7	39
11	4	19	7	41
12	4	18	7	42
13	4	16	7	44
14	4	14	7	46
15	4	13	7	47
16	4	12	7	48
D	4	10	7	50
18	4	9	7	51
19	4	7	7	53
20	4	6	7	54
21	4	5	7	55
22	4	3	7	57
23	4	2	7	58
D	4	1	7	59
25	4	0	8	0
26	3	58	8	2
27	3	57	8	3
28	3	56	8	4
29	3	55	8	5
30	3	54	8	6
D	3	53	8	7

It certainly requires the Pen of an Author of the first Rank, and far superior Abilities than the Writer of this Performance can pretend to, to display the Wonders every Day seen in this Terraqueous Globe. Fired, however, with the Magnificence of the Subject, and not without Hope that the Task, arduous as it is, and however meanly performed, may give Instruction to some of our Readers, and Amusement of the most rational Kind to all, we, according to our best Abilities, will proceed in Manner following.

In taking a View of this stupendous Fabric, we will first consider its Figure.—It appears by the Searches of the most ingenious and diligent Observers, that this our Globe is nearly spherical; and, therefore, of all possible Figures, this on many Accounts is the most commodious; first, as it is the most capacious, as its Surface is equi-distant from not only its Center, but also nearly from that of Gravity and Motion.

This Figure is likewise the best calculated of all others in regard to those two inestimable Benefits, Light and Heat; since by this Means they are uniformly imparted to the Globe, and its Inhabitants, coming on, and going off, in the same gradual Manner.

By this Means too the Diurnal and Annual Returns of Light and Darkness, Heat and Cold, Dry and Moist, are regular in Comparison to what they must have been had this great Orb been moulded in any other Form. This Construction again is the most commodious and best adapted for the Distribution of the Water.

B

This

M	h	21
D	X	22
1	22	28
6	23	29
11	23	30
16	23	1
21	23	2
26	23	3

Full Moon the 7th day, at 8 at night.

Last Quarter the 15th day, at 7 at night.

New Moon the 23d day, at 8 in the morning.

First Quarter the 30th day, at midnight.

M	W	Remarkable	☉	D Lon.	D rise	♂	♀	☿	Mut. Aspects
D	D	Days, &c.	II	gitude	and sets	8	11	II	and Weather
1	M	Whit-Mond.	11	20 ^m 17	0 m 21	7	12	30	Nicomede
2	T	Whit-Tuesd.	12	4 ^a 26	0 46	8	13	28	Pleasant and
3	W	Ember Week	13	18 28	1 10	9	14	3	fine season-
4	T	K. G. III. bo	14	2 ^m 21	1 36	10	15	5	able weather
5	F	Pr. Lr. Aug. b.	15	16 3	2 7	10	17	6	Boniface
6	S		16	29 34	2 43	11	18	8	Perhaps
7	D	Trinity Sund.	17	12 ^f 51	D rises	12	19	9	about this
8	M		18	25 53	8 a 47	13	20	11	Time some
9	T		19	8 ^h 40	9 29	13	21	12	hail
10	W	Oxf. T. beg.	20	21 13	10 2	14	23	13	☐ ♀
11	T	St. Barnabas	21	3 ^m 32	10 29	15	24	15	Corp. Christi
12	F	Trin. T. beg.	22	15 39	10 52	15	25	16	[* ♂ ☿
13	S		23	27 39	11 12	16	26	17	☐ ☉ ♀
14	D	1 S. aft. Trin.	24	9 ^h 33	11 31	17	28	18	
15	M		25	21 26	11 50	18	29	20	Agreeable
16	T		26	3 ^v 23	morn	18	28	21	
17	W	St. Alban	27	15 29	0 10	19	1	22	
18	T		28	27 48	0 33	20	3	23	Δ ♀ ☿
19	F		29	10 8 25	0 59	21	4	23	
20	S	Gr. E. KWS.	29	23 22	1 30	21	5	24	Winds
21	D	2 S. aft. Trin.	0	6 ^h 41	2 9	22	6	25	Longest day
22	M		1	20 24	2 58	23	7	26	* ♀ ♂
23	T		2	4 ^h 28	D sets	23	9	26	
24	W	Nat. J. Bapt.	3	18 49	8 a 51	24	10	27	Midsummer
25	T		4	3 ^h 21	9 28	25	11	27	
26	F		5	17 59	9 56	26	12	28	
27	S		6	2 ^m 34	10 21	26	14	28	
28	D	3 S. aft. Trin.	7	17 2	10 45	27	15	28	Sultry
29	M	St. Peter	8	1 ^a 19	11 9	28	16	29	* ♂ ☿
30	T		9	15 21	11 34	28	17	29	

Anon the Sun with fiercer Ray
 Around transmits his Heat,
 And shunning now the Blaze of Day,
 We seek the cool Retreat;
 The wide expanded Tree or mossy Cave,
 Or Rivers calm, and in the Waters lave.

MI. \odot miles \odot feet
 D. h m h m

OBSERVATIONS.

1	3	52	8	8	This will evidently appear, by supposing it of any
2	3	51	8	9	Form, either cubical, or what else your Fancy will
3	3	51	8	9	present to you;—for since it is evident by the Laws
4	3	50	8	10	of Gravity, if the Earth was cubical, or any other
5	3	49	8	11	angular Figure, one large Part would be drowned
6	3	48	8	12	and the other too dry. Hence it will appear evi-
D	3	48	8	12	dent to every thinking Man, that of all possible
8	3	47	8	13	Forms, the great Architect of the Universe has
9	3	46	8	14	chosen one the most proper, especially when we con-
10	3	46	8	14	sider what Influence high Mountains and Head-
11	3	45	8	15	lands have upon the Winds; how by these some are
12	3	45	8	15	invited, and others retarded, diverted, and changed
13	3	44	8	16	near the Shores: If, therefore, such little Masses
D	3	44	8	16	can produce these Effects, what would be the Ef-
15	3	44	8	16	fect of such large Angles which must have existed,
16	3	43	8	17	had the World been any other Form than orbicu-
17	3	43	8	17	lar.
18	3	43	8	17	The various Soils, Moulds, and Strata, of which
19	3	43	8	17	it is composed, wonderfully mark out to us the
20	3	43	8	17	Power and great Wisdom of its Divine Builder.
21	3	43	8	17	Here we find portioned out to every Seed its Cli-
22	3	43	8	17	mate, and to every Climate its proper Herbage.
23	3	43	8	17	Thus we find every Country, and every Soil aboun-
24	3	43	8	17	ding with Trees and Plants, suitable to its Nature,
25	3	43	8	17	and every one flourishing in its proper Soil, which
26	3	44	8	16	were it conveyed to another, would soon fade and
27	3	44	8	16	die.
D	3	44	8	16	Add to this, in the Formation of the World,
29	3	45	8	15	those Layers of Minerals, Metals, Stones, &c. with
30	3	45	8	15	the prodigious Use they are to Mankind. Hence
					the Materials for Buildings, Machines, Tools,
					Vessels, &c. Gold and Silver, are become the
					Basis of Commerce, the enricher of Nations;
					others are found useful in fertilizing our Lands;
					and how many more are useful for Physic, Colour-
					ing, &c. &c. neither you can guess, nor I describe.

M	h	h
D	X	h
1	23	4
6	23	5
11	23	6
16	23	7
21	23	8
26	23	9

Full Moon the 7th day, at 9 in the morning.

Last Quarter the 15th day, at 11 in the morning.

New Moon the 22d day, at 4 in the afternoon.

First Quarter the 29th day, at 6 in the morning.

M	W	Remarkable Days, &c.	☉	D Lon- gitude	D rises and sets	♂	♀	☿	Mut. Aspects and Weather.
D	D		h	m	h	m	h	m	
1	W	Trin. T. ends	10	29	9	morn	29	18	29
2	T	Visit. B. V. M.	11	12	43	0	6	30	20 R Agreeable
3	F	Dog Days beg.	12	26	3	0	37	11	21 29 weather
4	S	Tr. of S. Mart.	13	9	10	1	18	12	22 29 Δ h ♀
5	D	S. aft. Trin.	14	22	4	2	10	22	23 28 O. Midsum. d
6	M		15	4	47	3	2	32	25 28 Changeable
7	T	Tho. à Becket	16	17	19	D rises	3	26	28
8	W	[Camb. Com.	17	29	41	8	2	25	4 27 27 ♂ ♀ ♀
9	T		18	11	52	8	50	5	28 27
10	F	Cam. T. ends	19	23	55	9	12	5	30 26 * ♀ ♂
11	S		19	5	52	9	32	6	25 Brisk winds
12	D	S. aft. Trin.	20	17	44	9	50	7	25 with some
13	M	Oxford A&T	21	29	36	10	11	8	3 24 rain.
14	T		22	11	31	10	31	8	4 23 ♂ ☉ ♀ Δ h ♀
15	W	St. Swithin	23	23	35	10	55	9	6 23 Δ ☉ h
16	T		24	5	52	11	24	10	7 22 ♂ ♀ ♀
17	F		25	18	27	11	58	10	8 21 Sultry
18	S	Ox. T. ends	26	1	25	morn	11	9	21
19	D	S. aft. Trin.	27	14	49	0	42	12	11 20 * ♂ ♀
20	M	Margaret	28	28	40	1	36	12	12 20
21	T		29	12	58	2	42	13	13 19 Good har-
22	W	Magdalen	30	27	39	D sets	14	14	19 vest weather
23	T		1	12	34	7	2	54	14 16 19 upon the
24	F		2	27	36	8	22	15	17 19 whole.
25	S	St. James	3	12	34	8	48	16	18 18
26	D	S. aft. Trin.	4	27	20	9	11	16	19 D St. Anne
27	M		5	11	48	9	37	17	20 19
28	T		6	25	55	10	6	18	22 19
29	W		7	9	40	10	38	18	23 19 Showery
30	T		8	23	4	11	17	19	24 20
31	F		9	6	10	morn	20	25	20

Next Autumn see in rich Array,
 Succeeding Summer come,
 Joyous and busy is the Day
 To gather Harvest Home.
 Then Autumn flies to some more fertile Shore,
 And unto Winter leaves the Year once more.

M O rises O sets
 D h m h m

OBSERVATIONS.

1	3	46	8	14
2	3	46	8	14
3	3	47	8	13
4	3	47	8	13
D	3	48	8	12
6	3	49	8	11
7	3	49	8	11
8	3	50	8	10
9	3	51	8	9
10	3	52	8	8
11	3	53	8	7
D	3	54	8	6
13	3	55	8	5
14	3	56	8	4
15	3	57	8	3
16	3	58	8	2
17	3	59	8	1
18	4	0	8	0
D	4	2	7	58
20	4	3	7	57
21	4	4	7	56
22	4	5	7	55
23	4	7	7	53
24	4	8	7	52
25	4	10	7	50
D	4	11	7	49
27	4	12	7	48
28	4	14	7	46
29	4	15	7	45
30	4	17	7	43
31	4	18	7	42

Let us next, in viewing this grand Piece of divine Mechanism, (if I may so style it,) take Notice of those noble, and at the same Time necessary Appendages of this Terrestrial Globe, viz. Mountains and Vallies. These variegate the wonderful Scene, delight every Eye, and among the Poets have been the Song of Ages. Still pleasant, still delightful, whether from the Valley you behold the Mountains lifting up their lofty Heads, or whether from their Summits you behold the extensive Prospect of Fields and Groves, delightful Lawns, pleasing Meads, meandering Streams, shady Woods, lofty Palaces, and antique Towers, the Pride of ancient Days, while rolling Rivers hasten to old Ocean, which, mingling with the Sky, concludes the Prospect!

But leaving the Sons of Fancy to contemplate the Scene, of which I have here given but a slight, imperfect Sketch, proceed we now to shew how far this Form on the Surface of our Earth relates to our Convenience.

And here I observe through the Variety of Constitutions among us, although many are strong enough to be indifferent about their Situations, yet too many are otherwise, as the more subtle Air of the hilly Country suits many who are dying in Fogs or the more gross Air of the City or great Towns; so on the other hand, others who languish on the Mountain's summit, taste the delicious Joys of Health in the warm Valley below.

B 3

We

M	h	U
D	X	ss
1	23	11
6	22	12
11	22	13
16	22	15
21	22	15
26	21	16

Full Moon the 5th day, at 10 at night.

Last Quarter the 14th day, at 2 in the morning.

New Moon the 20th day, at 11 at night.

First Quarter the 27th day, at 3 in the afternoon.

M	W	Remarkable	☉	☽	☿	♂	♀	♂	Mut. Aspects
D	D	Days, &c.	Q	Longitude	and sets	☿	♀	♂	and Weather.
1	S	Lammas day	10	19 1	om	2	20	27	Fair weather
2	D	S. aft. Trin.	11	1 38	0	55	21	28	☿ ☉ ♄
3	M		11	14 4	1	53	22	29	△ ♄ ♀
4	T		12	26 22	2	55	22	30	☐ ♄ ♂
5	W		13	8 32	☽ rises	23	1	24	Rain or hail,
6	T	Transfigurat.	14	20 34	7 a	17	24	3	perhaps
7	F	Prs. Amelia b.	15	2 32	7	38	24	4	Na. of Jesus.
8	S		16	14 25	7	58	25	5	some thunder
9	D	S. aft. Trin.	17	26 16	8	17	26	6	
10	M	St. Lawrence	18	8 7	8	38	26	8	
11	T	Prs. Ant. b.	19	20 1	9	0	27	9	Dog-da end.
12	W	Fr. Wales b.	20	2 8 3	9	28	28	10	O. Lam. day.
13	T		21	14 18	9	59	28	11	6 Wind and
14	F		22	26 49	10	40	29	13	8 rain.
15	S	Assumption	23	9 43	11	26	30	14	10
16	D	S. aft. Trin.	24	23 3	morn	☿	15	12	D. of York b.
17	M		25	6 53	0	23	1	16	☿ ♄ ♀
18	T		26	21 12	1	32	2	17	15 Hot and dry
19	W		27	5 58	2	50	2	19	17
20	T		28	21 4	☽ sets	3	20	19	
21	F	Pr. W. H. b.	29	6 20	6 a	50	4	21	21 8 ♄ ♀
22	S		30	21 35	7	18	4	22	23
23	D	S. aft. Trin.	1	6 38	7	44	5	24	25 Wind and
24	M	St. Barthol.	2	21 21	8	12	6	25	27 some rain.
25	T		3	5 38	8	43	6	26	29
26	W		4	19 29	9	22	7	27	31 Variable
27	T		5	2 54	10	7	7	28	3
28	F	St. Augustine	6	15 57	10	57	8	30	5 ☿ ☉ ♀
29	S	Beh. St. J. Bap.	6	28 40	11	53	9	2	7
30	D	S. aft. Trin.	7	11 7	morn	9	2	9	* ☿ ♀
31	M		8	23 23	0	54	10	3	11

The Summer, Spring and Autumn o'er,
 Stern Winter comes again;
 Again, the blustering Tempests roar;
 Again descends the Rain,
 While scowling Heav'ns and naked Earth declare,
 The sad Remains of one revolving Year.

M. Orises
 D. n. m. n. m.

OBSERVATIONS.

14 20 7 40
 D 4 22 7 38
 34 23 7 37
 44 25 7 36
 54 26 7 34
 64 28 7 32
 74 30 7 30
 84 31 7 29
 D 4 33 7 27
 104 35 7 25
 114 37 7 23
 124 38 7 22
 134 40 7 20
 144 42 7 18
 154 44 7 16
 D 4 45 7 15
 174 47 7 13
 184 49 7 11
 194 51 7 9
 204 53 7 7
 214 54 7 6
 224 56 7 4
 D 4 58 7 2
 245 0 7 0
 255 2 6 58
 265 4 6 56
 275 6 6 54
 285 8 6 52
 295 9 6 51
 D 5 11 6 49
 315 12 6 47

We may here likewise consider the great Convenience of these Protuberances, in affording us the most convenient Place for Habitation: Screening from us the North and East piercing Blasts, while we are comforted by the Southern Sun, and the gentle Zephyr. Salubrious not only to ourselves, but the Garden which adorns our Habitation.

These Hills are likewise useful for the Production of different Species of Vegetables, and that in great Variety according to the Diversity of Soils there found. These too serve either for Food to those Animals who delight to live thereon; or Herbs and Roots for physical Use; and great Botanists have observed, that the greatest and most luxurious Species in most of the Genera of Plants are Natives of those Places.

Nor are they destitute of Inhabitants. Not only are high Mountains in Wales an Habitation for the Goats, but the high Tops of the tremendous Alps have the Ilex among the Quadrupeds, the Lagopus among the Birds, and the Papilio among great store of other Insects. Every Part of the Creation, it hence appears has its Use; he who formed the Mountains for these, formed them also for the Mountains.

Lastly, It is to these that the Fountains owe their Rise, and the Rivers their Conveyance. Proper Reflections upon these Objects will undoubtedly strike the Soul with Wonder, Wonder will lead it to Piety; and Piety lead it to Heaven.

24 SEPTEMBER hath xxx Days.

M	h	u
D	h	u
1	21	17
6	20	18
11	20	19
16	20	20
21	19	21
26	19	22

Full Moon the 4th day, at 2 in the afternoon.

Last Quarter the 12th day, at 3 in the afternoon.

New Moon the 19th day, at 7 in the morning.

First Quarter the 26th day, at 4 in the morning.

M	W	Remarkable	☉	D Lon-	D ites	♂	♀	☿	Mut. Aspects
D	D	Days, &c.	☿	gitude	and sets	☿	♂	☿	and Weather
1	F	Giles	9	5 ^m 30	1 m 59	11	5	13	Wind and
2	W	Lond. b. 1666.	10	17 31	3 5	11	6	15	Wet.
3	T		11	29 27	4 10	12	7	16	
4	F		12	11 ^h 20	D rises	12	8	18	* ☉ ♂
5	S		13	23 12	6 a 30	13	9	20	8 h ♀
6	D	13 S. aft. Trin.	14	5 ^v 3	6 52	14	11	22	
7	M	Enurchus.	15	16 57	7 15	14	12	24	Temperate.
8	T	Nativ. V. M.	16	28 54	7 39	15	13	25	
9	W		17	10 ^h 59	8 9	15	14	27	
10	T		18	23 15	8 45	16	16	29	☐ ♂ ♀
11	F		19	5 ^h 46	9 28	17	17	☿	8 ☉ h
12	S		20	18 3	10 21	17	18	2	Good and
13	D	14 S. aft. Trin.	21	1 ^h 51	11 25	18	19	4	* ☿ ♀
14	M	Holy Cross.	22	15 33	morn 19	20	5		fine Weather
15	T		23	29 43	0 36	19	22	7	Δ h ♂
16	W	Ember Week	24	14 ^h 20	1 52	20	23	9	
17	T	Lambert	25	29 19	3 15	20	24	10	
18	F		26	14 ^h 33	4 38	21	25	12	Rainy.
19	S		27	29 50	D sets	22	27	13	
20	D	15 S. aft. Trin.	28	15 ^h 0	6 a 21	22	28	15	
21	M	St. Matthew.	29	29 53	6 52	23	29	16	
22	F	K. G. III. cr.	30	14 ^h 21	7 28	23	☿	18	
23	W		1	28 22	8 10	24	1	19	
24	T		2	11 ^h 55	9 0	24	3	21	* ☿ ♀
25	F		3	25 2	9 56	25	4	22	
26	S	St. Cyprian	4	7 ^h 46	10 57	26	5	24	Windy at
27	D	16 S. aft. Trin.	5	20 12	morn 26	26	6	25	
28	M		6	2 ^h 24	0 1	27	8	27	☐ ♂ ♀
29	T	St. Michael.	7	14 26	1 7	27	9	28	Prs. Ch. A. M. b.
30	W	St. Jerome	8	26 22	2 12	28	10	29	the End.

On this then let us contemplate :

E'er Life's sad Season's o'er,

Since time it is, or, soon or late,

Ourselves shall be no more,

Quick as flies Time, so quick we run our Race,

And a new People shall supply our Place.

M. O. riles. O. sets

D. h. m. h. m.

OBSERVATIONS.

15 15 6 45

25 17 6 43

35 19 6 41

45 21 6 39

55 23 6 37

D 5 25 6 35

75 27 6 33

85 29 6 31

95 31 6 29

105 32 6 28

115 34 6 26

125 36 6 24

D 5 38 6 22

145 40 6 20

155 42 6 18

165 44 6 16

175 46 6 14

185 48 6 12

195 50 6 10

D 5 52 6 8

215 54 6 6

225 56 6 4

235 58 6 2

246 0 6 0

256 2 5 58

266 4 5 56

D 6 6 5 54

286 8 5 52

296 10 5 50

306 12 5 48

We hasten now to take a View of the various Inhabitants of this terraqueous Globe; and first let us speak of those winged ones who flit through the Air with such surprizing Velocity.

Here we see a surprizing Imitation of Reason in their various Actions. Their Skill in building their Nests; their Care to prepare them in Time; their Sagacity in a Collection of proper Materials for the same, and lining it so curiously to make a downy Bed for their callow Young. When they have laid as many Eggs as they can conveniently cover, their Prudence in leaving off, and betaking themselves to hatching, their painful Diligence therein, and the tender Care they have for their Young, are all wonderful, nor do they cease their parental Care, till,

"Rous'd into Life and Action, light in Air,
"The joyful Parents see their soaring Race."

So numerous are different Kinds of Birds, that it is supposed Five Hundred different Kinds falls short of the Number; some of these chiefly exist upon what they catch in the Air, or pick up from Trees, &c. others chuse the Earth for their Dwelling; while a third Sort delight in Water. The Feather of these are proof against the Wet, their Necks long, and their Feet webbed, suitable to the Element for which they were destined: while Birds of Prey are armed with pointed Beaks and strong Talons.

Some of these are small, and belong to the Singing Tribe, while the larger Sort have disagreeable Voices.

Of

26 OCTOBER hath xxxi Days,

1823
D 18

Full Moon the 4th day, at 7^h in the morning.

Last Quarter the 12d day, at 2^h in the morning.

New Moon the 18th day, at 4^h in the afternoon.

First Quarter the 25th day, at 8^h at night.

1	18	23
6	18	24
11	18	25
16	18	26
21	17	27
26	17	27

M D	Remarkable Days, &c.	☉ Lon	☽ Rites	♂	♀	☿	Mut. Aspects and Weather
1 T	Remigius	9 8 X 14	3 m 17	28	11	1	
2 F		10 20 6	4 21	29	12	2	Cold blasts of
3 S		11 1 V 58	5 25	30	14	3	Wind about
4 D	17 S. aft. Trin.	12 13 54	☽ Rites	31	15	5	the Begin-
5 M		13 25 55	5 a 53	1	16	6	ning, with
6 T	Faith.	14 8 8 1	6 22	1	17	7	
7 W		15 20 16	6 55	2	18	8	☿ ♀
8 T		16 2 II 42	7 36	2	20	10	Some showers
9 F	St. Denys.	17 15 20	8 24	3	21	11	
10 S	Ox. & Ca. T. b.	18 28 15	9 21	3	22	12	O. Mich. Da.
11 D	18 S. aft. Trin.	19 11 23 29	10 29	4	23	13	
12 M		20 25 4	11 40	5	24	14	☿ ♀
13 T	Tr. K. Ed. Co	21 9 Ω 3	morn	5	26	15	Snow or frost,
14 W		22 23 24	6 59	6	27	16	
15 T		23 8 ♄ 5	2 19	6	28	17	♂ ♀
16 F		24 23 0	3 40	7	29	18	* ♀
17 S	Etheldred	25 8 ♄ 2	5 2	7	1	19	Moderate.
18 D	19 S. aft. Trin.	26 23 2	☽ Rites	8	2	20	St. Luke.
19 M		27 7 m 51	5 a 29	8	3	20	[* ☉ ♀
20 T		28 22 21	6 10	9	4	21	
21 W		29 6 ♄ 28	6 56	9	5	21	Cloudy, with
22 T		30 20 8	7 51	10	7	22	Rain or snow.
23 F		1 3 ♄ 22	8 52	10	8	22	
24 S		2 16 12	9 56	11	9	22	
25 D	20 S. aft. Trin.	3 28 42	11 c	11	10	K	K. G. III. ac.
26 M	K. G. III. pr.	4 10 55	morn	12	11	22	[Crispin.
27 T		5 22 57	0 6	12	13	22	♂ ♀
28 W	St. Sim. & Jude	6 4 X 51	1 12	13	14	22	Rough and
29 T		7 16 42	2 15	13	15	21	windy, to
30 F		8 28 34	3 20	14	16	21	♂ ♀
31 S		9 10 V 30	4 25	14	17	2	wards the End

Thus 'tis with us; first Spring appears,
 And soon Life's Summer's past;
 Next Autumn in declining Years,
 Brings Winter in at last:
 Decrepid Age comes on and calls aloud,
 To bring the Wretch a Coffin and a Shroud.

Miles
 D h m

OBSERVATIONS.

Miles	D	h	m
16	14	5	46
26	16	5	44
36	18	5	42
D 6	20	5	40
56	22	5	38
66	24	5	36
76	26	5	34
86	28	5	32
96	29	5	31
106	31	5	29
D 6	33	5	27
126	35	5	25
136	37	5	23
146	39	5	21
156	41	5	19
166	43	5	17
176	45	5	15
D 6	47	5	13
196	49	5	11
206	51	5	9
216	53	5	7
226	55	5	5
236	56	5	4
246	58	5	2
D 7	05		0
267	24		58
277	44		56
287	64		54
297	84		52
307	94		51
317	114		49

Of the largest Size of Birds we may justly reckon the Ostrich, the Cassowary, and the Contour of Peru, which is a Bird of that Magnitude, Strength, and Appetite, that it will seize not only Sheep and lesser Cattle, but larger ones likewise, and even Children.

A Bird of this Kind measured sixteen Feet from Wing to Wing extended; the chief Feather in the Wing was two Feet four Inches long; the Quill Part was five Inches three Quarters in Length, and one Inch and a Half about in the Thickest Part; it weighed three Drams seventeen Grains and a Half, and was of a Brown Colour. Nature has denied these Creatures the Talons which she has given to the Eagle; their Feet being tipped with Claws like a Hen; their Beak is however strong enough to tear off the Hide, or rip up the Belly of an Ox; two of them will attempt a Cow or a Bull, and devour him. They have assaulted Boys of ten Years of Age, and eaten them. Their Colour is Black and White, like a Magpie: they have on the Fore Part of their Heads a Comb, in the Form of a Razor: when they alight from the Air, the Fluttering of their Wings is astonishing. These, as they are the most pernicious of Birds, so they are the most rare, just enow to keep up the Species, but not to overcharge the World. Thus, the Balance of the Animal World is continually kept even, and by a curious Harmony, and just Proportion between the Increase of all Animals, and the Length of their Lives, the World through Ages is stored, but not overstocked.

Speak

M	h	u
D	x	u
1	17	28
6	17	9
11	17	29
16	17	30
21	17	0
26	17	1

Full Moon the 2d day, at midnight.

Last Quarter the 10th day, at 10 in the morning.

New Moon the 17th day, at 3 in the morning.

First Quarter the 24th day, at 4 in the afternoon.

M	W	Remarkable	☉	☽ Lon-	☽ rises	♂	♀	☿	Mut. Aspects
D	D	Days, &c.	h	gitude	and sets	Ω	♂	h	and Weather
1	D	2 ^d S. aft. Tr.	10	22 32	5 m 30	15	19	19	All Saints
2	M	Fr. Edward b.	11	4 42	☽ rises	15	20	18	All Soul. Δ h ☿
3	T	Fr. Sophia b.	12	17 3	5 a 1	16	21	16	□ ♂ ☿
4	W		13	29 34	5 38	16	22	15	
5	T	Powder Plot	14	12 18	6 25	17	23	14	♂ ☉ ☿
6	F	Leonard.	15	25 15	7 19	17	25	13	Mic. Ter. b
7	S	D. of Cum. b.	16	8 25	8 21	17	26	11	
8	D	22 S. aft. Tr.	17	21 49	9 32	18	27	10	Fr. Aug. So. b.
9	M	Ld Mayor'sd.	18	5 29	10 46	18	28	9	[Δ ☉ h
10	T		19	19 23	morn	19	29	8	□ ☉ ♂, Δ 14 ♀
11	W	St. Martin.	20	3 32	0 3	19	30	7	Dull, heavy
12	T		21	17 53	1 21	20	2	7	and wet.
13	F	Britius	22	2 23	2 41	20	3	7	
14	S		23	16 58	4 1	20	4	D	Then expect
15	D	23 S. aft. Tr.	24	1 33	5 22	21	5	6	Machutus
16	M		25	16 2	6 40	21	6	7	a frosty Air,
17	T	Hugh Bp. Lin.	26	0 1	☽ sets	22	8	7	
18	W		27	14 19	5 a 34	22	9	8	
19	T		28	27 58	6 33	22	10	8	but stormy
20	F	Edm. K & M.	29	11 14	7 37	23	11	9	
21	S		30	24 8	8 42	23	12	10	□ ☉ 14
22	D	24 S. aft. Trin.	1	6 42	9 49	24	14	11	Cecilia. O. Mart
23	M	St. Clement.	2	18 59	10 55	24	15	12	* h ♀
24	T		3	1 2	morn	24	16	13	with Rain or
25	W	D. of Glou. b.	4	12 57	0 0	25	17	14	Catherine.
26	T		5	24 48	1 4	25	18	16	Δ h ☿
27	F		6	6 41	2 7	25	19	17	Snow at the
28	S	Mic. T ends.	7	18 38	3 11	26	21	18	
29	D	Advent Sun.	8	0 45	4 16	26	22	19	End.
30	M	St. Andrew.	9	13 5	5 21	26	23	21	

Our Friends around us mourning stand,
 And wet is ev'ry Eye:
 They take us by the death-cold Hand,
 And hear our parting Sigh;
 Anon th' officious Sexton tolls our Bell;
 Anon he digs our Grave; and World farewell.

M	Orises		sets	
	D	h	m	m
D	7	13	4	47
	27	15	4	45
	37	17	4	43
	47	18	4	42
	57	20	4	40
	67	22	4	38
	77	24	4	36
D	7	25	4	35
	97	27	4	33
	107	29	4	31
	117	30	4	30
	127	32	4	28
	137	33	4	27
	147	35	4	25
D	7	37	4	23
	167	38	4	22
	177	40	4	20
	187	41	4	19
	197	42	4	18
	207	44	4	16
	217	45	4	15
D	7	47	4	13
	237	48	4	12
	247	49	4	11
	257	51	4	9
	267	52	4	8
	277	53	4	7
	287	54	4	6
D	7	55	4	5
	307	56	4	4

OBSERVATIONS.

Speak we next of Quadrupeds. Those who have been curious in examining the Wonders of the Creation, inform us of no less than one Hundred and Fifty entire and different Kind of Beasts, or Four-footed Creatures.

Among all these of various Shapes and Sizes, from the largest to the most minute, we find the most curious Mechanism. And the Surface of the Earth is covered with different Soils, with Hills, Vales, &c. so all these have their animal Inhabitants, whose Organs of Life and Action are manifestly adapted to such Places and Things, and whose Food and Physic, and every other Convenience of Life is to be met with at the Place it is destined to inhabit; we here observe too, that not only the temperate Climates have their Beasts suitable to them, but even also the Torrid and Frigid Zones have also theirs, every one of which has a Sagacity suitable to the Station in which it is fixed, and a Body which delights in the Climate wherein it is placed.

Of Insects we might speak with wonderful Adoration to the great Creator of all, where neither Birds nor Beasts could exist, how many of these of various Kinds find a comfortable Habitation. Those who have made Microscopical Observations on the Insect Part of the Creation, have observed by the help of Glasses, that stagnated Waters appearing of divers Colours, proceeds from Insects of several Colours, and different Kinds. Nor is the Earth, or Air itself, free from the Seeds of Life. The surprising Minuteness of some of these exceeds Conception, and the Mechanism of such diminutive Bodies cannot be considered without Astonishment.

Let

60 DECEMBER hath xxxi Days.

Day	Hour	Minute
1	17	1
6	17	1
11	17	1
16	17	1
21	17	1
26	17	1

Full Moon the 2d day, at 5 in the afternoon.
 Last Quarter the 9th day, at 6 in the afternoon.
 New Moon the 16th day, at 5 in the afternoon.
 First Quarter the 24th day, at 1 in the afternoon.

M	W	Remarkable Days, &c.	☉	D	lon- gitude	D	rites and sets	♂	♀	☿	Mur. Aspects and Weather
D	D		☉	☉		☉					
1	T		10	25	39	6	m 26	27	24	22	
2	W		11	8	30	D	rites	27	25	24	Changeable.
3	T		12	21	37	5	a 6	27	26	25	
4	F		13	4	59	6	9	28	27	27	☐ ♂ ♀.
5	S		14	18	36	7	16	28	29	28	* ♀ ♀.
6	D	2 S. in Adv.	15	2	23	8	29	28	30	30	Nicholas
7	M		16	16	20	9	44	28	27	27	☐ ☉ ♀, ☐ ♀ ♀
8	T	Concep. V.M.	17	0	23	11	1	29	2	3	
9	W		18	14	30	morn	29	3	4		Cold winter-ly Weather.
10	T		19	28	40	0	18	29	4	6	
11	F		20	12	51	1	37	29	5	7	
12	S		21	27	0	2	53	30	7	9	
13	D	3 S. in Adv.	22	1	6	4	11	30	8	10	Lucy
14	M		23	25	6	5	24	30	9	12	
15	T	[Emb. Week	24	8	58	6	33	0	10	13	Rain, Snow
16	W	Sept. C.T.e.	25	22	37	D	sets	0	11	15	or sleet.
17	T	Oxf. T. ends.	26	6	3	5	a 0	1	12	16	☐ ♀ ♀
18	F		27	19	11	6	12	1	13	18	
19	S		28	2	2	7	20	1	14	19	Unsettled.
20	D	4 S. in Adv.	29	14	35	8	26	1	16	21	
21	M	St. Thomas.	0	26	52	9	32	1	17	22	Sh.d. ♂ ♀ ♀
22	T		1	8	56	10	36	1	18	24	☐ ☉ ♀, ☐ ☉ ♀
23	W		2	20	54	11	39	2	19	26	
24	T		3	2	42	morn	20	2	20	27	Frost & Snow
25	F	Christmas D.	4	14	33	0	43	2	21	29	
26	S	St. Stephen	5	26	30	1	45	2	22	29	☐ ♀ ♀, ☐ ♂ ♀
27	D	St. John	6	8	38	2	51	2	23	2	S. aft. Christ.
28	M	Innocents.	7	21	2	3	55	2	24	3	
29	T		8	3	45	5	0	2	25	5	More tem-
30	W		9	16	49	5	56	2	26	7	perate.
31	T	Silvester	10	0	16	6	49	2	27	8	

Yet Hope, which soften'd every Pain,
Through all our Labours past;
Still does that Blessing, Hope retain,
Nor leaves us at the last.
Hope ev'n in Death presents us fresh Supplies;
And points a Heav'n of Bliss beyond the Skies.

M. O'iles O'lets

D h m h m

OBSERVATIONS.

1	7	57	4	3
2	7	58	4	2
3	7	59	4	1
4	8	0	4	0
5	8	1	3	59
D	8	2	3	58
7	8	3	3	57
8	8	3	3	57
9	8	4	3	56
10	8	5	3	55
11	8	5	3	55
12	8	6	3	54
D	8	6	3	54
14	8	7	3	53
15	8	7	3	53
16	8	7	3	53
17	8	8	3	52
18	8	8	3	52
19	8	8	3	52
D	8	8	3	52
21	8	8	3	52
22	8	8	3	52
23	8	8	3	52
24	8	8	3	52
25	8	7	3	53
26	8	7	3	53
D	8	7	3	53
28	8	6	3	54
29	8	6	3	54
30	8	6	3	54
31	8	5	3	55

Let us next turn our Eyes to the Aquatic Species, and there behold an Element in which neither Man nor Beast could exist, furnished with innumerable Inhabitants of all Dimensions, who could no more live in Air, than we in Water.

As these Creatures destroy one another, Provision is made for this by their prodigious Multiplication; so that what is destroyed is far inferior to their Increase: an Instance of which is, that many Hundreds of Ships are yearly employed on the Bank of Newfoundland in the taking of Cod; these generally carry away about 20,000 each; yet although this vast Consumption has been yearly made for about 200 Years, yet the same Plenty still continues.

It is not a little surprising that those Creatures, who live in a Liquid so salt as the Sea is, should therein still preserve their Freshness.

The Hand of Providence is wonderfully seen in conducting those most for our use, near to our Coasts, or up our Rivers, while others which are useless, or perhaps dangerous affect Remoteness.

Whoever seriously reflects upon these Things, must acknowledge that the Universe in all its Parts declares its Omnipotent Author; and say with the Poet,

1.
" Across the Waves, around the Sky,
" There's not a Spot, or deep, or high,
" Where the Creator has not trod,
" And left the Footsteps of a God."

Of the ECLIPSES and other PHENOMENA in the present Year 1789.

WITHIN the Circuit of the present Year, the Two great Luminaries will each of them be twice eclipsed; of which Defects only one will be visible to the Inhabitants of this Isle. However, taking them in order as they shall happen, we shall begin with the First, which is of the Moon and will happen on Saturday the ninth Day of May, as follows:

Beginning May 9, 8 Hours 38 Min. 1 Manc.

Middle 9 31

End 10 24

Total Duration 1 46

Digits eclipsed 2 Deg. 54 Min. of D's Northern Limb.

Although this Eclipse be invisible to us, yet it will be visible to the Western Parts of North and South America, and the Whole will be seen at the Philippine, Sandwich, and Friendly Islands, New Holland, Japan, &c.

The Second will be an Eclipse of the Sun, and will happen on Sunday the 24th Day of May, at 20' past 10 at Night, and consequently will be invisible to us. However, at 10h. 18min. the Sun will be centrally eclipsed on the Meridian, in Long. 154 Deg. 29 Min. West, and Lat. 11 Deg. 15 Min. South.

The Third will be a visible Eclipse of the Moon, as follows:



Beginning Nov. 2, at 11 H. 27 M. Night.

Middle Nov. 3, at 0 32 Morn.

End Nov. 3, at 1 36 Morn.

Total Duration 2 9

Digits eclipsed 3 Deg. 40 Min. on South Limb.

See the Type in the Margin.

The abovementioned Eclipse will be visible to the Inhabitants of both Europe and Africa, as also to the Western Parts of Asia, and the Eastern Parts of America, and in Part in China and Chinese Tartary, but with them the Moon will set before the Eclipse is over.

The Fourth, and Last Eclipse will be of the Sun, and will happen on Tuesday the 17th Day of November, at 3 Hours 29 Min. in the Morning, and consequently will be invisible to us. It however will be a central one on the Meridian, at 3 Hours 22 Min. in Long. 129 Deg. 31 Min. East, and North Lat. 14 Deg. 45 Min. and will therefore be seen by the Inhabitants of China, Japan, and the Eastern Parts of Tartary in Asia.

The

The next Phenomenon that will this Year attract the Attention of every Votary of the Divine Urania, is a remarkable Transit of the Planet Mercury over the Face of the Sun. This will, according to the best Astronomical Tables, happen as follows:

Ingress or Beginning Nov. 5th 1 h. 10 m. P. M.

Ecliptic Conjunction 3 30

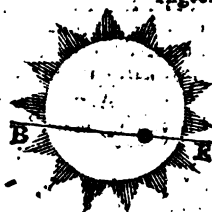
Middle of the Transit 3 37

Sun sets 4 40

Central Egress or End 6 4

Total Duration 4 54

For further Illustration see the Type in the Margin.



The next Thing I shall mention, which will, when it happens, engage the Attention of the Curious, is the expected Return of a Comet late in the Year 1788, or early in that of 1789, and at the furthest before the Commencement of May. As Astronomers have in general agreed, that the Comets of 1532 and 1661 were the same, its Return in 1789 is rationally expected, especially as the Comet in 1531, 1607, and 1682, according to Dr. Halley's Prediction in his *Synopsis Astronomiæ Cometicae*, punctually returned in the Year 1759. As this Doctrine of Comets is not yet established, for want of a sufficient Quantity of just Astronomical Observations, I shall conclude with the Observation of one of our best modern Astronomers upon the Subject before us.

If (says he,) it should come to its Perihelium on the 1st of January 1789, it might probably be visible with a good Achromatic Telescope in its Descent to the Sun; the Middle of September 1788; and sooner or later, according as its Perihelium is sooner or later.

It will approach us from the Southern Parts of its Orbit, and therefore will appear with considerable South Latitude and South Declination, so that Persons residing near the Equator, or in Southern Latitude, will have an Opportunity of discovering it before us. And it were much to be desired, that it might first be seen by good Astronomers in such a Situation, and furnished with proper Instruments for settling its Place in the Heavens, the earliest good Observations being the most valuable for determining its Elliptic Orbit, and proving its Identity with the Comets of 1532 and 1661. For this Purpose the Cape of Good Hope is recommended as an excellent Situation.

This being a Subject that has employed the Pens of the greatest Poets and Philosophers, and indeed the Thoughts of every Child of Genius and Fancy, I shall here introduce, from the

best

best Writers both in Prose and Verse, what I imagine may be either for the Improvement or Amusement of my kind Readers.

Comets were till of late ever looked upon as Forerunners of Divine Wrath, and the Messengers of Heaven's Displeasure; thus we find in Homer,

"As the Red Comet from Saturnus sent,
 "To fright the Nations with a dire Portent;
 "(A fatal Sign to Armies on the Plain,
 "Or trembling Sailors on the wat'ry Main.)
 "With sweeping Glories glides along in Air,
 "And shakes the Sparkles from his blazing Hair."

And again in Virgil :

"The threat'ning Comets when by Night they rise,
 "Shoot sanguine Streams, and sadden all the Skies.

True Philosophy however has found that Comets are opaque, spherical, and solid Bodies, of a very solid, compact and durable Substance, capable of the greatest Degree of Heat and Cold without Dissolution; shining like other Planets by Reflection of the Sun-beams, performing their Revolutions about the Sun in elliptical Orbits, and at stated Periods, having that Luminary in one of their Foci.

Nay, even in the Days of Ignorance before mentioned, we find the great Seneca, superior to the Infatuation of the Age, thus expressing himself : "I cannot (says that great Man) agree with our Philosophers, nor think the Comets are Fires suddenly kindled, which appear awhile and are then extinguished; but I reckon them among the eternal Works of Nature. And why should we wonder that Comets (such a rare Spectacle in the World,) should not yet be restricted by certain Laws; nor have the Times of their Appearance or Disappearance known, as they take their Courses through such prodigious Intervals of Space.—The Time will come when a Day shall bring to Light, and the Diligence of a future Age discover, those Things which now lie hid."

"The Time will come in which Posterity will wonder that we were ignorant of Things so very plain.—A Person shall one Day arise, who shall demonstrate into what Regions the Comets wander, why they move so separately from the Rest of the Planets; and how large and of what Kind of Bodies they are."

The gloomy Ideas of the Ancients, and the bright Conceptions of the modern Philosophers upon this Subject, were never better contrasted than in the following sublime and beautiful Lines of the truly ingenious Thomson upon this Subject.

• L 6 !

Lo! from the dread Immanity of Space
 Returning with accelerated Course,
 The rushing Comet to the Sun descends;
 And as he sinks below the shading Earth,
 With awful Train projecting o'er the Heav'ns,
 The guilty Nations tremble.—But, above
 Those superstitious Horrors that enslave
 The fond sequacious Herd, to mystic Faith
 And blind Amazement prone, th' enlighten'd Few,
 Whose godlike minds Philosophy exalts,
 The glorious Stranger hail. They feel a Joy
 Divinely great; they in their Pow'rs exult,
 That wond'rous Pow'r of Thought, which mounting, spurs
 This dusky Spot, and measures all the Sky.
 While, from his far Excursion through the Wilds
 Of barren Ether, faithful to its Time,
 They see the blazing Wonder rise anew,
 In seeming Terror clad, but kindly bent
 To work the Will of all sustaining Love:
 From his huge vap'ry Train perhaps to shake,
 Reviving Moisture on the num'rous Orbs,
 Thro' which his long Ellipsis winds; perhaps
 To lend new Fuel to declining Suns,
 To light up Worlds, and feed th' eternal Fire.*

It has been observed that the Eccentricity of the Orbits of Comets is so amazing great, that some of them have been observed to perform the greatest Part of their Motion nearly in a right Line, both in their Approach to the Sun, and in their Retreat from it, when they appear as if they were hastening back to the fixed Stars, till they are out of our Sight, and return not till after a Period of many Years.

In their Approach to the Sun, their Motion is continually accelerating; for they describe equal Areas in equal Times about its Center, as do the Planets. Hence, when they are at their least Distance from the Sun, their Motion is immensely swifter than when they are at their greatest Distance; and this will account for their being visible to us for so short a Time; and having once disappeared, their being so long before they come again within human Ken. And however the Ancients might differ in Opinion, some considering the Comets as wandering Stars, others as Meteors kindled in the Atmosphere, subsisting for a Time, and then dissipated, while the Generality considered them as ominous Prodigies; it is now beyond all Doubt, from the more accurate Observations of late Astronomers, that they are a Kind of Planets. That they are not Meteors is evident, for if they were, they could not possibly bear that intense Heat

which some of them in their nearest Approach must receive from the Sun; that of 1680 being within a sixth Part of the Sun's Diameter from its Surface, and consequently must have acquired a Degree of Heat beyond our Conception. Lastly, what we call the Tail of the Comet, is a prodigious Quantity of Fume and Vapour, flying off from the Body of the Comet as it becomes more and more heated in its Approach to the Sun. They appear largest and most brilliant immediately after their Return from the Sun; being then the hottest, and emitting the greatest Quantity of Vapour. The Tail always lies towards those Parts which the Body of the Comet leaves in its Descent. It appears broader in its upper Part than near the Head of the Comet, which is all agreeable to the Nature of Smoke and Vapours. As a Proof that the Tail of a Comet is a fine pellucid Vapour, the fixed Stars have been seen through them. Lastly, the Tails of Comets are amazingly long, some having been computed in Length to be not less than 80,000,000 of Miles.

The ingenious Mr. Rowning observes that, as to those *Phænomena* which arise from the Motion of the Earth, they agree in a great Measure with those of the Planets. For instance, those Comets that move according to the Order of the Signs, a little before they disappear, become more than ordinary *slow* or *retrograde*, if the Earth at that Time be between them and the Sun; but their ordinary *swift*, if the Earth be on the opposite Side; and the Reverse of this happens to those who move contrary to the Order of the Signs. This is occasioned by the Motion of the Earth; for when the Earth goes the same Way with the Comet, but with a swifter Motion, the Comet appears *retrograde*; when with a slower Motion, the Comet's apparent Motion becomes slower; and when the Earth moves the contrary Way, it becomes swifter.

The Particular in which Comets differ from the Planets, are as follows. They move in various Directions, some the same Way with the Planets, others the contrary; neither are their Motions confined within the Zodiac, their Orbits admitting of any Inclination to the Ecliptic whatever.

The same worthy Gentleman, in a Note annexed, gives a Method by which Astronomers may investigate the apparent Course of a Comet, with which I shall close this Account.

They observe what two Stars are directly one on one Side the Comet, and the other on the other, which is done by holding up a Thread between the Eye and the two Stars, and extending it in such a Manner that it shall seem to cross each Star: Then they look out two other Stars in such Situation also, that the Comet shall appear in a Line that passes from one to the other. They then extend a Thread on the Celestial Globe over the two first

first Stars, and another over the two last, and the Point of the Globe where the Threads cross each other, is the apparent Place of the Comet at the Time of Observation. And by doing this daily they trace its apparent Course in the Heavens.

I shall now, according to my usual Method, make some few Observations upon the four Quarters; and then proceed to the Enigmatical Part of this my annual Performance.

THE WINTER QUARTER.

This Quarter takes its Commencement at the Sun's Ingress into Capricorn, which will this Year be on the 20th Day of December, at 2h. 14 min. in the Morning. Having now touched his utmost southern Limit, he gives the shortest Day and longest Night to the Inhabitants on this Side the Equator.

And while the southern Lands beneath him burn,
The shivering North implores his kind Return.

The Year is ushered in with some disagreeable Aspects, whose Effects will be felt both in Public and Private. As to public Affairs; much Debate and Consultations among the Senates of various Realms, with very little Determination. It is the Blessing of Poverty that it brings Peace; but it is the Cause of Peace that it is attended by Poverty. As to private Affairs, I shall only say,

Youth beware! Age look to thyself! *Caelum ad nos spectat,
Caelum spectemus oportet, nam Deus Astra dedit Caelo, oculoque tibi.*



OF the SPRING QUARTER.

" Conquer'd with soft and pleasing Charms,
 " And never-failing Vows of her Return,
 " Winter unlocks his frosty Arms,
 " To free the joyful Spring ;
 " Which for fresh Loves with youthful Heat does burn ;
 " Warm South Winds court her, and with fruitful Show'rs,
 " Awake the drowsy Flow'rs,
 " Who haste, and all their Sweetness bring
 " To pay their yearly Offering.
 " No nipping White is seen,
 " But all the Fields are clad in pleasant Green,
 " And only fragrant Dews now fall ;
 " The Ox forsakes his once warm Stall,
 " To bask i'th' Sun's much warmer Beams :
 " The Plowman leaves his Fire and his Sleep,
 " Well-pleas'd to whistle to his lab'ring Teams ;
 " While the glad Shepherd pipes to's frisking Sheep.
 " Nay, tempted by the smiling Sky,
 " Wreck'd Merchants quit the Shore ;
 " Resolving once again to try
 " The Wind and Sea's almighty Pow'r,
 " Chusing much rather to be dead than poor.

" Upon the flow'ry Plains,
 " Or under shady Trees,
 " The Shepherdesses and their Swains
 " Dance to their rural Harmonies ;
 " Then steal in private to their covert Groves,
 " There finish their well-heighten'd Loves.

Horace, Lib. I. Ode 4.

On the 20th Day of March, at 33 Min. past three in the Morning, the bright God of Day enters the Celestial Aries ; and crossing the Equator, gives once more equal Day and Night ; and from hence we date the Spring Quarter. The Scheme of the Heavens at this Ingress we hope we have given with the greatest Accuracy. Those who please to examine the Planetary Aspects, at the Commencement of this Season, will find some very favourable ones. They will moreover perceive in the annexed Scheme that Sagittary is upon the Medium Cœli, and 27 Deg. 10 Min. of Capricornus ascend ; moreover, all the Planets, excepting the Moon, are *sub Terra*. Those who are curious in this Art, will from the above Scheme judge for themselves. Those who despise it will undoubtedly turn over the Leaf : it is however surprising (says an ingenious Author)

that

that the World has not arrived at a greater Improvement towards the Knowledge of the Nature of the Stars, as they have of their Motions; which has been wonderfully improved, while the other has been as much neglected. If any of our Readers, however, though unskilled in the Science, should want Information, I beg leave to tell them, that the Papers of the Year 1789, will inform them of several Things which in 1788, they never expected.

OF the SUMMER QUARTER.

On the 21st Day of June at 1 Hour 55 Min. *more*, the Sun enters upon the first Degree of Cancer, having now made his highest Advances toward the Northern Pole; and giving us the Longest Day and Shortest Night, or admitted Twilight, no Night at all. And here commences our Summer Quarter.—The Variety of Aspects in this Quarter and the next foretel a busy World, and the Seeds of grand Mutations are growing apace. Perhaps some of Daniel's Prophecies are about being accomplished; but of that I only conjecture, and proceed to

The AUTUMNAL QUARTER.

This Quarter commences upon the Sun's first Entrance upon the Celestial Balance Libra, which happens on the 22d Day of September, at 3 Hours 28 Min. in the Afternoon. As to the Article of Prognostication, much may be said, but little is to be depended upon. If any cry Peace, Peace, let them know, *There is no Peace, saith my God, to the Wicked*. And the Lord knows that the best of us are bad enough. We have seen in our Day unexpected Revolutions; our Successors will see more; a Hint is enough; for to tell when, how, or what, is more Arrogance than I pretend to. Many Readers are too fond of the Wonderful; and many Pretenders to the Astrologic Art, too ready to oblige them, to the Discredit of the Profession, and at the Expence of Truth; and there will never be wanting Rogues to sell a Pack of Lies, while there are Fools to buy them. And he who goes to the pretended Conjurors for Advice, is no Conjuror himself, I assure him. It was well said by a learned Gentleman,

“The Stars that in their Courses roll

“Have much Instruction giv'n.”

To which I think any one may safely reply,

Howe'er that be, it's not for me

To fetch down News from Heav'n.

Unsearchable are the Ways of the Lord, and his Doings with Men are past finding out. He changeth the Times and the Sea-

sons; he removeth Kings, and setteth up Kings; but are we of his Councils? If we at an humble Distance behold his Wonders in the Heavens, and by the Experience of former Ages are enabled to take a glimmering View into the Regions of Obscurity, it is as much as any but the Deceiver, or the vain-glorious Boaster, will pretend to.

If more is offer'd, as a Lie receive it;
It ne'er can do you harm till you believe it.

The Answers to the ENIGMAS, &c. in our last are as follows:

1st Enigma, a Watering-Pan	2d. Lies
2d. A Pair of Scales	3d. Rage
3d. A Beard	4th. Nothing
4th. A Blush	1st. Charade, Buckthorn
5th. An Ass	2d. Sonnet
6th. A Shade	3d. Mile-stone
7th. A Shepherd	4th. Horse-shoe
1st Rebus, Ewe	5th. Grave stone.

A concise Answer to all the Enigmas, by Mr. J. Ward, of Hinckley.

Of *Shepherds, Blushes, Wat'ring-Pans*, and *Shade*, 7, 4, 1, 6
Scales, Beards, and *Asses* are th' Enigmas made. 2, 3, 5

All the Enigmas answer'd by Mr. John Needham, of Hinckley.

In fam'd Hinckley Town's my Cot,
Though it does not appear Alamode
In the *Scale* of the Great; though my Lot 2
Is not in Prosperity's Road.

I take Nature's Law for my Guide,
With no silly *Asses* I stray; 5
And 'gainst Penury's Pangs to provide,
I honestly labour all Day.

While the *Vot'ries* of Bacchus carouse,
In the *Shade* at the Close of the Day; 6
With my *Wat'ring Pan* fetch'd from my House 1
I hie to my Garden away.

What though fickle Fortune has sent
No Titles, nor rich furnish'd Hall,
I live in my Station content,
And I praise the great *Shepherd* of all. 7

And

And each *Blushing* Meeting I prize,
That in such Sort my Hours may be spent,
That with Age, when my *Beard* is grown Grey,
I may lay down my Life with Content.

A general Answer to the same by Mr. G. Knapp, Norwich.

Stern Winter gone, behold the Sun
Doth *Shepherd's* Joys advance;
And *Beard*-less Boys express their Joys,
With *Blushing* Maids to dance.

Say where's the *Ass*, who would not pass,
In some sequester'd *Shade*;
Where Love won't fail to turn the *Scales*,
With some reluctant Maid.

His Hours so sweet, while at her Feet,
Flora her Flowers flings,
Where Aid of Man, or *Wat'ring-Pan*,
Alas! are useless Things.

The same answer'd by Mr. T. Davies Churchill.

At close of Day, in Ev'ninge hot,
Then comes in use the *Wat'ring-Pot*.
Who e'er paints Justice, never fails
To grace her with a *Pair of Scales*.
The hoary Head, and sev'rend *Beard*;
By *Blush*-ing Youth should be rever'd.
He who in loitering lets Life pass,
Is sure more stupid than an *Ass*.
For weary Age the Grave's a *Shade*;
And this is all the *Shepherd* said
To Clog, who to prove her Man, fir,
To Season's Riddler ask'd an Answer.

A general Answer by Mr. R. D. Churchill, in a Poem entitled

A Farewell to Folly.

Adieu ye vain and loose Delights,
Blush, Mortals, at the rev'ling Nights;
By which full often, Man, alas!
Is metamorphos'd to an *Ass*.
Night's Shade, to cover Sin, is chose,
But oh! on this no more repose.

Darkness,

Darkness, 'tis true, from mortal Eyes,
Screens Murders, Thefts, Adulteries.
But he who *balances* this Ball,
That high Supreme who governs all,
The *Shepherd* great, who never sleeps,
A dreadful Book of reck'ning keeps.
These Things consider well before
With Age thy *Beard* is silver'd o'er.
And let thy Tears for each ill Deed,
Those of the *Water-Pot* exceed.
So may'st thou hope to find on high,
A Seat of bliss, beyond the Sky.

All the Enigmas answered in Gaffer and Grace, a Tale by
Poor Robin.

Gaffer and Grace sat in the Chimney Nook,
He with his Pipe ;—she poring o'er a Book.
At last, quoth puzzled Grace, I've got a Pack
Of Riddles here in Season's Almanack.
Can you explain them ?—Yes, says he, I can.
And what's the First ?—Why it's a *Wat'ring-Pan*.
And what's the Second ?—Lord (said he) what ails
Your foolish Head ?—Why it's a *Pair of Scales*.
Well, what's the Fourth then ?—Gaffer answer'd—hush,
Nought that you're guilty of ;—it is a *Blash*.
And what's the Fifth ?—Quoth Gaffer, let that pass,
What don't you know your Kinsfolk ?—'Tis an *Ass*.
But what's the Sixth, and Seventh ?—Why, (Gaffer said)
The Seventh's a *Shepherd*, and the Sixth a *Shude*.
Yet here's the Third, quoth Grace, we have to seek,
Here Gaffer rub'd his Chin 'gainst Grace's Check ;
Grace squall'd aloud, and cry'd I hate such Tricks,
Your ugly *Beard* (plague on it) how it pricks ;
How could you serve me so, you stupid Elf ?
Blood ! Grace, said he,—You've found that out yourself.

The Rebuses answer'd by Candiane.

Of Rebuses I think you had but Four,
Ewe, Lies, Rage, Nothing, all their Names explore.

The Charades answered by Mr. J. Ward, Hinckley.

Behold the *Buckthorn, Sinner, Herfeshes* too,
With *Grave*, and *Mistone*, brings them all to View.

The Rebusses and Charades, answered by Mr. John Needham, Hinckley.

Rage shall *Nothing* trouble me,
 I'll read your *Sonnet* o'er;
 While *Life* remains I'll careful be,
 To tell vain *Lies* no more.

3, 4 Reb.
 2 Cha.
 2 Reb.

Of *Horse-shoe*, *Mill-stone*, *Thorn*, or *Ewe*, 4, 3, 1 Ch. 1 R.
 The *Tales* no more I'll prize;
 The *Grave-stone* shall inform me true,
 The *Way* to be more wise.

5 Cha.

Quere First, answered by Mr. J. Needham, Hinckley. And Mr. Peter Fidler.

Dieu et mon Droit, i. e. God and my Right, was first used as a Motto by Richard the First, on a Victory over the French in the Year 1194. But more probably by Edward the Third, laying Claim to France; for Charles his Mother's Brother dying, Philip of Valois had possessed himself of the Kingdom, alledging the salique Law; but Edward asserted that this Law, in excluding Females, did not exclude their Male Issue from the Succession, and on this he grounded his Title; his first Campaign was without Bloodshed, but he took the Title of King of France, and quarters his Arms with the *Fleurs de lis* adding the Motto *Dieu et mon Droit*.

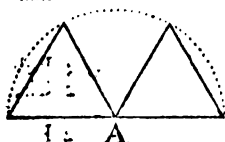
In like Manner it was answered by Mr. G. Knapp, and J. Ward, Hinckley.

Quere Second, answered by Mr. J. Ward, Hinckley.

A great Number of watery Particles arise from our Respiration, or Perspiration in Rooms, especially where Persons are assembled together; these evidently float, and come into contact with the Glass; here the Coldness of the external Air condenses the internal watery Particles into a Hoar Frost, while the Outside is free.

This was answered in like Manner by Mr. J. Needham, and Mr. Peter Fidler.

Third Quere, answered by Mr. J. Needham, Hinckley.



Within the Scheme annex'd you'll see,
How five Trees planted there may be;
And at point A, you may protest
You're equidistant from the Rest.

Mr. J. Ward, Hinckley, answered it in the same Way.

New ENIGMAS for the Year 1789.

First Enigma, by Mr. J. G. Nottingham.

Though I'm always in Peace, I am present in Strife,
And tho' ever in Death, I am always in Life.
Though no Drunkard I am, yet in Wine I delight,
I'm pleas'd too in Ale, but in Liguors not right,
I am never on Land, but in th' Midst of the Sea,
Now tell me ye Bards what my Name it must be.

Second Enigma, by Mr. G. Knapp.

I'm compos'd of a Tooth, right uniform made,
Without e'er a Member; without e'er a Head.
Like a Mappie you'll find I am black mix'd with white,
And about me two Brothers are ready to Fight.
But hold, Sirs, I think I have told you too much,
Heav'n grant that my Poison you never may touch.

Third Enigma, by Mr. T. Greenlees.

A num'rous Race we may be seen,
Of being I declare;
Well known to our good King and Queen,
And many a gentle Fair.

In London almost every Street,
You may us there behold;
But frequently we're very neat,
And often clad in Gold.

A many Things of which we're made,
 Come from old Mother Earth;
 But Man, our Parent, it is said,
 Is known to give us Birth.

But though we're often dress'd in Gold,
 We sometimes Silver wear;
 And oftentimes we very bold,
 In Black and White appear.

Fourth Enigma, by Mr. Peter Fidler, near Boffover.

Trophy of Honour, Oh ye Sons of Mars,
 I gild your Victories acquir'd in Wars;
 For when detain'd in Actions great and brave,
 Aloft in Air triumphantly I wave,
 And shine, resplendent in my Country's Cause,
 True to its Maxims, loyal to its Laws,
 In Shape I'm various, and in Colour too,
 My different Parts assume a different Hue.
 Singly to ev'ry Country I am known;
 But in Old England, two in one I'm shewn.
 The Boast her Sons, with Honour hold my Right;
 And bold like me, be Valiant in the Fight;
 So great's my Use. Now, Heroes, tell my Name,
 From what I've said, and then rehearse my Fame.

Fifth Enigma; by Mr. Bryan Waudby, Goodmanham.

First know I liv'd a many Ages past,
 And to my Master I was bound full fast.
 He being dead, no Life I then must have,
 Because I only liv'd to be his Slave:
 But quite unnotic'd, unobserv'd I lay,
 Till, strange to tell, upon a certain Day,
 By Row'r impell'd, straight up again I rose,
 And spread Destruction 'mong surrounding Foes.
 Deaf to their Cries, and fearless to their Rage,
 I shew'd no Mercy, spar'd nor Youth nor Age:
 I had a Partner, who, as Records say,
 His Business done, he cast his Friend away.
 But great was my Good-nature you may think,
 For after all I made my Partner drink.
 But now I only ask (to spread my Fame,)
 Diarian Bards, pray tell the World my Name.

Sixth Enigma, by Mr. John Ward, Hinckley.

Ye studious Gents, who chuse to give my Name,
 Geometry consult to know my Frame.
 The which is sometimes oblong, square, or round;
 Four Feet I have which never walk the Ground.
 My Canopy is strew'd with fragrant Flow'rs,
 A Fountain cool likewise adorns my Bow'rs.
 And oft you'll find, to beautify the Scene,
 Just in the Center stands a lovely Green.
 But what avails the Beauty, or the Cost,
 Vain is the Whole, alas! when Freedom's lost.
 But hold, I only add that you may see
 A Safeguard, and a Prison, both in me.

New REBUSES, QUERIES, CHARADES, &c.
 to be answered in our Next.

Quere First, by Mr. Knapp.

What is the meaning of the Motto in the Coronet of the
 Prince of Wales, ICH DIEN, and why was it inserted?

Quere Second, by Mr. Obrien Waudby.

Pray what's the Reason, tell to me,
 Why do we find in stirring Tea,
 The Spoon seems bent unto our View?
 Which though oft seen, is know to few.

Quere Third, by R. D. Churchill.

Ye Bards who've long in *Season* sung,
 Tell me from whence the Custom sprung,
 That we should Eastward turn with Speed,
 When we repeat th' Apostle's Creed?

Quere Fourth, by Mr. Needham, Hinckley.

When, or by whom, and on what Account, was the Title of
Defender of the Faith, added to that of King of Great Britain,
 &c.?

Quere

Quere Fifth, by the same.

What was the Value of the Thirty Pieces of Silver, which the Jews gave Judas to betray his Lord and Master?

Quere Sixth, by Mr. T. D. Churchill.

As Custom goes, you see we find,
In the Interment of Mankind,
That they the East do always face;
I wish you would a Reason trace.

First Rebus, by Mr. T. Greenlees.

Two Thirds of a grave Bishop's Robe,
When join'd to the Place where I live,
Between the Hills in a High-road,
The Rebus's Answer will give.

Second Rebus, by Mr. J. Ward, Hinckley.

I'm seen distinctly with a Microscopic Eye;
And when transpos'd all Things on Earth I do destroy.

The following by Mr. P. Fidler, near Boleover.

Anagram. A Mineral if right transpos'd will show
 A Measure which all English People know.

Rebus. Reverse a Measure it will tell,
 A Fruit we all know very well.

Paradox. One Day resolv'd a Paradox to make,
 I four from six most certainly did take;
 Five-times-eleven, I found was left me then,
 And now the Method shew, kind Gentlemen.

First Charade, by Mr. J. Needham, Hinckley.

My Rest comes from Fire, now pray mind what I say;
And it goes towards Heaven through a dark dismal Way.

My

My second's a Name that is well known to John ;
 So far my Charade has gone pretty well on.
 And now, if to miss of my third you're afraid,
 Go into the Kitchen, and question the Maid.

Second Charade, by Random Shandy.

My first is not old, and my second's not new ;
 My third brings a beautiful Town to your view.

The Author once more presents his humble Thanks to all his kind Contributors, and begs that in Future whatever they please to favour him with, they will give an Answer with it, otherwise it cannot be inserted.

F I N I S.

Ὀλύμπια Δάματα

O R, A N

ALMANACK

For the YEAR of

Our LORD GOD, 1789;

Being the First after

BISSEXTILE, or LEAP-YEAR,

And from the World's Creation, 5793.

Wherein are Contained the Lunations, Conjunctions, Aspects, and Effects of the Planets; the Increase, Decrease, and Length of the Days and Nights; with the Rising, Southing, and Setting of the Planets and fixed Stars throughout the Year; whereby may be known the exact Hour of the Night at all Times, when either the Moon or Stars are seen.

Calculated according to Art, and referred to the Horizon of the ancient and renowned Borough Town of *Stamford* (formerly a famous University) whose Latitude is 52 Deg. 20 Min. fitting all the middle Counties of *ENGLAND*, and, without sensible Error, the whole Kingdom.

Non est e Terris mollis ad Astra Via.

By **TYCHO WING**, *Philomath.*

L O N D O N :

Printed for the COMPANY of STATIONERS,

And sold by ROBERT HORSFIELD, at their Hall, in Ludgate-Street.

[Price, stitched, NINE-PENCE.]

Common NOTES and Moveable FEASTS.

Dominical Letters	- D	Septuagesima Sund.	Feb. 8
Golden Number	- 4	Shrove Sunday	Feb. 22
Epañt	- 3	Easter Day	April 12
Cycle of the Sun	- 6	Whit-Sunday	May 31
Roman Indiction	- 7	Trinity Sunday	June 7
Number of Direction	- 22	Advent Sunday	Nov. 29

A CATALOGUE of the Most Reverend, Right Reverend, and Reverend, the Archbishops, Bishops, and Deans, exercising Ecclesiastical Jurisdiction in England, 1789.

<i>Archbishops.</i>	<i>Deans Names.</i>	<i>Sees Names.</i>
Dr. John Moore	Dr. George Horne	Canterbury
Dr. Wm. Markham	Dr. John Fountayne	York
<i>Bishops.</i>		
Dr. Beilby Porteus	Bishop Pretyman	London
Dr. Thomas Thurlow	Hon. Dr. Wm. Digby	Durham
Hon. Dr. Br. North	Dr. Newton Ogle	Winchester
Sir Wm. Ashburnham	Dr. Charles Harward	Chichester
Dr. Charles Mofs	Lord Fran. Seymour	Bath & Wells
Dr. Jonathan Shipley	Mr. W. Shipley	St. Asaph
Hon. Dr. S. Barrington	Dr. John Ekins	Salisbury
Dr. John Hinchcliffe	Dr. Charles Tarrant	Peterborough
Hon. Dr. James Yorke	Dr. William Cooke	Ely
Dr. John Thomas	Dr. Thomas Dampier	Rocheſter
Dr. Richard Hurd	Hon. Dr. St. John	Worceſter
Dr. John Butler	Dr. Nat. Wetherell	Hereford
Dr. John Roſs	Dr. William Buller	Exeter
Dr. John Warren	Dr. Thomas Lloyd	Bangor
Hon. Dr. J. Cornwallis	Dr. Proby	Litchf. & Cov.
Dr. Samuel Hallifax	Dr. Joſiah Tucker	Glouceſter
Dr. Lewis Bagot	Dr. Philip Lloyd	Norwich
Dr. Richard Watſon	Dr. Adams, Archdeac.	Landaff
Dr. Edward Smalwell	Dr. Cyril Jackſon	Oxford
Dr. Chriſtoph. Wilſon	Dr. J. Hallam	Briſtol
Dr. Wm. Pretyman	Dr. Richard Kaye	Lincoln
Dr. John Douglas	Dr. Joſeph Ekins	Carliffe
Dr. William Cleaver	Dr. Cotton	Cheſter
Dr. Samuel Horſley	Mr. Wollaſton, Prec.	St. David's
	Biſhop Thomas	Westminſter
Mr. Claudius Crigan		Sodor & Man
	Biſhop Douglas	Windſor

A TABLE of TERMS and Returns for the Year 1789.

HILARY Term begins January 23, ends February 12.

Returns or Essoign Days.	Exc.	Ret.	App.	W. D.
In eight Days of St. Hilary - - - Jan. 20	21	22	23	Friday
In fifteen Days of St. Hilary - - - 27	28	29	30	Friday
On the Mor. of the Purif. of the Bl. V. M. Feb. 3	4	5	6	Friday
In eight Days of the Purif. of the Bl. V. M. 9	10	11	12	Thursd.

EASTER Term begins April 29, ends May 25.

In fifteen Days of Easter - - - April 26	27	28	29	Wedn.
From Easter Day in three Weeks - May 3	4	5	6	Wedn.
From Easter Day in one Month - 10	11	12	13	Wedn.
From Easter Day in five Weeks - 17	18	19	20	Wedn.
On the Mor. of the Ascension of the Lord - 22	23	24	25	Mond.

TRINITY Term begins June 12, ends July 1.

On the Morrow of the Holy Trinity June 8	9	10	12	Friday
In eight Days of the Holy Trinity - 14	15	16	17	Wedn.
In fifteen Days of the Holy Trinity - 21	22	23	24	Wedn.
From the Day of the Holy Trinity in 3 Weeks 28	29	30	J. 1	Wedn.

MICHAELMAS Term begins November 6, ends November 28.

On the Morrow of All Souls - Nov. 3	4	5	6	Friday
On the Morrow of St. Martin - 12	13	14	16	Mond.
In eight Days of St. Martin - 18	19	20	21	Saturd.
In fifteen Days of St. Martin - 25	26	27	28	Saturd.

N. B. No Sittings in Westminster-Hall on the Second of February, Ascension-day, and Midsummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but Four Days.

Note, The first and last Days of every Term, are the first and last Days of Appearance.

The Names of the Learned J U D G E S in the Law.

I. Rt. Hon. Lord Thurlow, Lord High Chancellor.

Right Hon. Sir Richard Pepper Arden, Knt. Master of the Rolls.

I. In the { Rt. Hon. Lord Kenyon, Lord Chief J. Sir Nash Grose, Knt.
K. Bench. { Sir Wm. Henry Ashurst, Knt. Fran. Buller, Esq.

III. In the { Rt. Hon. Al. Ld. Loughborough, L. C. J. Sir H. Gould, Knt.
Co. Pleas. { John Heath, Esq. Sir John Wilson, Kt.

IV. In the { Sir James Eyre, Knt. L. C. B. Sir Alex. Thompson, Kt.
Exchequer. { Sir Beaumont Hotham, Knt. Sir Rich. Perryn, Kt.

Sir Arch. M'Donald, Knt. Att. Gen. Sir John Scott, Knt. Sol. Gen.

The REGAL Table.

The Year, Month, and Day, when each King and Queen began to reign, accounting the Year to begin January 1.			Length of each Reign.			Number of Years expired since their Reigns ended.		
Kings Names	began to reign		Y.	M.	D.	end	King's Names	
William I.	1066	Oct. 14	20	10	26	402	William	1
William II.	1087	Sept. 9	12	10	24	389	William	2
Henry I.	1100	Aug. 2	35	3	29	654	Henry	1
Stephen	1135	Dec. 1	18	10	24	635	Stephen	
Henry II.	1154	Oct. 25	34	8	11	600	Henry	2
Richard I.	1189	July 6	9	9	0	590	Richard	1
John	1199	April 6	17	6	13	573	John	
Henry III.	1210	Oct. 19	56	0	28	517	Henry	3
Edward I.	1272	Nov. 16	34	7	21	482	Edward	1
Edward II.	1307	July 7	19	6	18	42	Edward	2
Edward III.	1327	Jan. 25	50	4	27	42	Edward	3
Richard II.	1377	June 21	22	3	8	390	Richard	2
Henry IV.	1399	Sept. 29	13	5	20	36	Henry	4
Henry V.	1413	Mar. 20	9	5	11	367	Henry	5
Henry VI.	1422	Aug. 31	38	6	4	328	Henry	6
Edward IV.	1461	Mar. 4	22	1	5	306	Edward	4
Edward V.	1483	April 9	0	2	13	306	Edward	5
Richard III.	1483	June 22	2	2	0	304	Richard	3
Henry VII.	1485	Aug. 22	23	8	0	280	Henry	7
Henry VIII.	1509	April 22	37	9	6	242	Henry	8
Edward VI.	1547	Jan. 28	6	5	8	236	Edward	6
Q. Mary I.	1553	July 6	5	4	1	231	Q. Mary	
Q. Elizabeth	1558	Nov. 17	44	4	7	26	Q. Elizabeth	
James I.	1603	Mar. 24	22	0	3	104	James	1
Charles I.	1625	Mar. 27	23	10	3	140	Charles	1
Charles II.	1649	Jan. 30	36	0	7	104	Charles	2
James II.	1685	Feb. 6	4	0	7	100	James	2
Will. 3. & M.	1689	Feb. 13	13	0	23	87	William	3
Q. Anne	702	Mar. 8	12	4	24	75	Q. Anne	
George I.	1714	Aug. 1	12	10	10	62	K. George	1
George II.	1727	June 11	33	4	14	29	K. George	2
George III.	1760	Oct. 25	Crowned Sept. 22, 1761.					

The Use of the following TABLE of the Moon's Southing, to find the Time of High-Water, and the Hour of the Night.

**I. To find the Time of High-Water in most Parts of
E N G L A N D.**

Take the Time of the Moon's Southing for the Day proposed, and to that add the Hours and Minutes which stand against the Place required in the following Table of Sea-Coasts, and the Sum will be the Time of High-Water at the Place required on that Day.

A Table of the Sea Coasts.

	H. M.
<i>Portsmouth, Queenborough, Southampton,</i>	0 00
<i>Rochester, Winchelsea, Flushing,</i>	0 45
<i>Downs, Gravesend, Ramkins, Guernsey,</i>	1 30
<i>Denbigh, Bell-Isle, Holy-Isle, Downs-Road,</i>	2 15
<i>London, Tinnmouth, Whitby, Hartlepool,</i>	3 00
<i>Scarborough, Berwick, Flushing, Staples,</i>	3 45
<i>Flamborough, Humber, Bridlington-Bay,</i>	4 30
<i>Plymouth, Ramfay, Newcastle, Severn,</i>	5 15
<i>Lynn, Fosdyke, Hull, Weymouth, Dartmouth, Cross-Keys,</i>	6 00
<i>Boston, Start-Point, Foulness, Bristol-Key,</i>	6 45
<i>Bridge-water, Milford Haven, Lizard, Wintertown,</i>	7 30
<i>Yarmouth, Isle of Wight, the Needles,</i>	8 15
<i>Isle of Man, Orkney, Pool, South-Foreland,</i>	9 10
<i>Dorset, Harwich, Orfordness, Bullein,</i>	10 10
<i>Rye, Solebay, Margate-Road,</i>	11 15

**I. To find the Hour of the Night by the Shadow of the
Moon on a Sun-Dial.**

1. When the Shadow falls precisely on the Hour 12, then the Time of the Moon's Southing, found in the preceding Table is the exact Time of Night. But in other Cases,

2. If the Shadow wants of 12, see how much it wants of it; which Time, subtracted from that of the Moon's Southing, leaves the Time of Night. *Note,* You must add 12 Hours to the Moon's Southing, if Need be.

3. If the Shadow has past 12, add the Time that it has past it to the Time of the Moon's Southing; the Sum will be the Time of Night required; abating 12 Hours from that Sum, if Need be.

A TABLE of the MOON'S SOUTHING, of excellent Use to

M	January	February	March	April	May	June	M
D	h m	h m	h m	h m	h m	h m	D
1	3 a 4	4 a 19	3 a 5	4 a 3	5 a 27	6 a 52	1
2	4 22	5 6	3 54	5 34	6 21	7 43	2
3	5 3	5 5	4 45	6 30	7 13	8 34	3
4	5 46	6 4	5 39	7 26	8 5	9 26	4
5	6 32	7 46	6 35	8 21	8 57	10 20	5
6	7 21	8 45	7 33	9 15	9 49	11 14	6
7	8 14	9 46	8 31	10 8	10 43	morn	7
8	9 11	10 45	9 28	11 2	11 38	o 8	8
9	10 10	11 43	10 25	11 57	morn	1 1	9
10	11 13	morn	11 20	mo. n	o 33	1 52	10
11	morn	o 40	morn	o 52	1 2	2 41	11
12	o 13	1 34	o 15	1 47	2 22	3 27	12
13	1 11	2 27	1 9	2 43	3 14	4 10	13
14	2 7	3 20	2 4	3 38	4 4	5 2	14
15	3 o	4 13	2 59	4 31	5 1	6 33	15
16	3 52	5 o	3 54	5 21	6 36	7 15	16
17	4 42	5 58	4 48	6 9	7 19	8 58	17
18	5 32	6 50	5 4	6 5	7 c	8 43	18
19	6 23	7 41	6 31	7 39	8 42	9 30	19
20	7 14	8 30	7 20	8 21	9 25	10 21	20
21	8 5	9 18	8 7	9 3	10 9	11 15	21
22	8 52	10 3	8 52	9 45	10 56	11 11	22
23	9 46	10 47	9 35	10 28	11 45	o a 9	23
24	10 35	11 29	10 17	11 13	12 37	1 7	24
25	11 22	o a 11	11 59	o a 1	o a 32	2 4	25
26	o a 6	o 53	11 41	o 52	1 29	2 59	26
27	o 48	1 35	o a 25	1 45	2 26	3 52	27
28	1 30	2 19	1 11	2 40	3 22	4 43	28
29	2 11		1 5	3 36	4 17	5 34	29
30	2 53		2 50	4 32	5 10	6 25	30
31	3 35		3 43		6 1		31

Spring Quarter begins - March 20d 3h 53m morning.
 Summer Quarter begins - June 21 1 55 morning.
 Autumn Quarter begins - Sept. 22 3 22 afternoon.
 Winter Quarter begins - Dec. 21 7 59 morning.

find the Time of High-Water, and the Hour of the Night.

M	July		August		September		October		November		December		M
D	h	m	h	m	h	m	h	m	h	m	h	m	D
1	7	a 18	8	a 43	10	a 0	10	a 19	11	a 12	11	a 25	1
2	8	9	9	34	10	44	11	0	11	59	morn		2
3	9	2	10	23	11	27	11	42	morn		0	17	3
4	9	56	11	10	morn		morn		0	48	1	11	4
5	10	49	11	56	0	10	0	26	1	39	2	6	5
6	11	40	morn		0	52	1	11	2	31	3	0	6
7	morn		0	40	1	34	1	58	3	24	3	53	7
8	0	29	1	22	2	18	2	47	4	17	4	44	8
9	1	16	2	4	3	4	3	38	5	10	5	35	9
10	2	0	2	46	3	52	4	31	6	3	6	25	10
11	2	43	3	29	4	42	5	25	6	55	7	17	11
12	3	25	4	13	5	35	6	20	7	47	8	8	12
13	4	6	5	0	6	29	7	14	8	39	9	2	13
14	4	48	5	49	7	25	8	8	9	32	9	57	14
15	5	31	6	41	8	21	9	2	10	2	10	53	15
16	6	16	7	36	9	17	9	56	11	24	11	50	16
17	7	4	8	32	10	13	10	50	0	a 21	0	a 44	17
18	7	56	9	30	11	8	11	46	1	18	1	36	18
19	8	51	10	28	0	a 4	0	a 44	2	14	2	25	19
20	9	48	11	25	1	1	1	42	3	8	3	11	20
21	10	47	0	a 22	1	57	2	39	3	58	3	55	21
22	11	40	1	18	2	54	3	35	4	45	4	57	22
23	0	a 44	2	13	3	50	4	29	5	30	5	18	23
24	1	39	3	7	4	45	5	20	6	13	6	c	24
25	2	33	4	1	5	39	6	8	6	55	6	42	25
26	3	26	4	56	6	31	6	54	7	36	7	26	26
27	4	18	5	51	7	21	7	38	8	18	8	12	27
28	5	11	6	44	8	8	8	20	9	1	9	1	28
29	6	4	7	36	8	53	9	2	9	47	9	52	29
30	6	57	8	26	9	37	9	44	10	35	10	46	30
31	7	50	9	14			10	27			11	42	31

VENUS is a Morning Star till May 20, and then an Evening Star for the rest of the Year.

JUPITER is a Morning Star till January 14, then an Evening Star till August 2, and then a Morning Star to the end of the year.

Lunations.		M D	Jupiter sets	Venus sets
First Quarter	4th day, at 4 afternoon.	1	5 a 0	5 m 6
Full Moon	11th day, at 6 afternoon.	7	4 29	5 20
Last Quarter	18th day, at 9 morning.	13	3 59	5 31
New Moon	26th day, at 6 morning.	19	3 20	5 41
		25	2 50	5 50

M W D	Holy Days, Oriles & fets	D rises & fets	D's Longit.	D's Declin.	Aspects and Weather
1 Th	Circumcision	9 a 30	6 X 31	4 s 19	Expect in this month
2 F		10 41	18 25	0 n 6	☐ ♀
3 S		11 46	0 V 25	4 32	rough winds with
4 D	S. af. Christ.	morn	12 37	8 53	snow or flett.
5 M	Old Chr. st. day	0 54	25 5	12 57	
6 Tu	Epiphany	2 4	7 8 53	16 33	Tw. D. * ♀
7 W		3 14	21 6	19 27	Frost and snow
8 Th	Lucian	4 25	4 II 46	21 20	or cold rain with
9 F		5 20	18 55	21 57	stormy winds and
10 S		6 26	3 30	21 8	much wintery
11 D	S. aft. Epiph.	D rises	18 26	18 49	weather.
12 M	Plow Monday	5 a 42	3 Ω 36	15 12	O. New Y. day
13 Tu	Hilary	7 8	18 4	10 34	Cam. T. begins
14 W	Oxf. T. begins	8 31	3 X 53	5 20	8 ☉ ♀
15 Th		9 53	18 41	0 s 8	6 ♂ ♀
16 F		11 13	3 7	5 27	Perhaps more mild
17 S	Old Twelfib-d.	morn	17 7	10 20	8 ♀
18 D	S. af. Epiph.	Prisca	om 41	14 32	Q. Ch. b. d. kept
19 M		1 45	13 51	17 54	8 ♀ ♂
20 Tu	Fabian	2 55	26 41	20 17	for some days,
21 W	Agnus	3 58	9 14	21 37	6 ☉ ♀
22 Th	Vincent	4 52	21 33	21 52	
23 F	Hil. Ter. beg.	5 38	3 4	21 5	but ends most
24 S		6 17	15 47	19 20	probably with
25 D	S. af. Epiph.	6 48	27 45	6 45	Conv. St. Paul
26 M		D sets	9 39	13 29	* ♀
27 Tu	Pr. Aug. Fr. b.	6 a 14	21 32	9 42	
28 W		7 17	3 X 24	5 34	blustring winds, and
29 Th		8 21	15 16	1 14	
30 F	K. Cha. I. mart.	9 25	27 12	3 n 11	Snow or cold rain.
31 S		10 32	9 V 13	7 30	

M	Saturn		Jupiter		Mars		Venus	
	D	Longit.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	6	10 5 42	26 25 35	21 n 16	10 15 32	23 s 55	5 f 24	19 s 28
7	7	10 30 25	45 21	26	15 9 23	30	12 45	20 48
13	7	10 16 25	0 21	36	19 47 22	56	20 7 21	47
19	8	10 2 24	11 21	45	24 27 22	13	27 30 22	24
25	7	12 0 47	21 21	54	29 7 21	2	4 15 54	22 37

M	☉'s		☉'s		Observations
	L	Longit.	Declin.		
1	11	15 38	22 s 57		Pole Star south at 6h. 15m. afternoon.
2	12	35	22 52		Saturn sets at 8h. 51m. afternoon.
3	13	4	22 46		Mars rises at 4h. 50m. afternoon.
4	14	41	22 39		Day breaks at 5h. 57m.
5	15	43	22 32		
6	16	44	22 25		Seven Stars south at 8h. 20m. afternoon.
7	17	45	22 17		Sun rises at 8h. 0m.
8	18	4	22 9		Saturn sets at 8h. 25m. afternoon.
9	19	47	22 0		Jupiter rises at 4h. 19m. afternoon.
10	20	49	21 51		
11	21	50	21 42		Sun sets at 4h. 4m.
12	22	51	21 32		Day light ends at 6h. 7m.
13	23	52	21 21		Clock before the ☉ 9m. 27sec.
14	24	53	21 11		Sun rises at 7h. 52m.
15	25	24	20 59		
16	26	55	20 48		Pole Star south at 5h. 10m. afternoon.
17	27	56	20 36		Saturn sets at 7h. 54m. afternoon.
18	28	57	20 23		Jupiter rises at 3h. 34m. afternoon.
19	29	5	20 11		Sun enters ☿ 38m. past noon.
20	0	5	19 53		
21	2	0	19 41		Seven Stars south at 7h. 16m. afternoon.
22	3	1	19 30		Day breaks at 5h. 43m.
23	4	3	19 16		Sun rises at 7h. 40m.
24	5	4	19 1		Clock before the ☉ 12m. in 44sec.
25	6	5	18 46		
26	7	6	18 31		Sun sets at 4h. 21m.
27	8	6	18 18		Day light ends at 6h. 23m.
28	9	7	18 0		Saturn sets at 6h. 53m. afternoon.
29	10	8	17 43		Jupiter rises at 2h. 39m. afternoon.
30	11	9	17 27		
31	12	10	17 10		

Lunations.			M D	Jupiter sets	Venus sets
First Quarter	3d day, at 9 morning.		1	5m 4c	5m 57
Full Moon	10th day, at 4 morning.		7	6 74	6 1
Last Quarter	16th day, at 10 night.		13	5 45	6 2
New Moon	25th day, at 1 morning.		19	5 24	6 0
			25	5 1	5 58

M	W	Holy Days, ☉ rises & sets	D rise & sets	D's Longit.	D's Declin.	Aspects and Weather
1	D	4 S. af. Epiph.	11 a 41	21 7 24	11 n 35	Cloudy with rain, ☐ ♀ ♀
2	M	Purif. Can. day	morn	3 8 47	15 16	
3	Tu	Blasé	0 49	16 29	18 19	or snow.
4	W		1 50	29 33	20 33	
5	Th	Agatha	3 4	13 11 3	21 41	Sharp air with snow or cold rain.
6	F		4 4	27 21	21 32	
7	S		4 55	11 23 30	19 58	8 74 ♀
8	D	Septuagesima	5 30	26 24	17 1	
9	M		6 14	11 23 38	12 52	Rough winds and cloudy towards the middle of the month.
10	Tu		D rises	27 0	7 51	
11	W		7 a 18	12 17 19	2 22	
12	Th	Hil. T. ends	8 43	27 25	3 s 12	
13	F	Old Cand. day	10 4	12 26	8 25	6 74 ♀
14	S	Valentine	11 22	26 20	13 2	
15	D	Sexagesima S.	morn	10 17 3	16 46	After more moderate
16	M		0 38	23 17	19 30	for the season, but
17	Tu		1 44	6 7 7	21 9	
18	W		2 44	18 36	21 41	soon varies.
19	Th		3 31	0 15 50	21 10	Δ 74 ♀
20	F		4 14	12 53	19 40	
21	S		4 47	24 49	17 20	
22	D	Quinq. Shro. S.	5 16	6 41	14 17	Wet, dark and unsettled weather,
23	M	[Tuesday	5 41	18 32	10 42	
24	Tu	Matthias. Shr.	6 1	0 13 24	6 41	Pr. Ad. Fred. b.
25	W	Ash-Wednes.	D sets	12 18	2 24	
26	Th		7 a 18	24 15	1 n 56	and so continues
27	F		8 25	6 17	6 18	
28	S		9 32	18 25	10 26	to the end.

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Decl.	Longit.	Decl.	Longit.	Decl.	Longit.	Decl.
1	10 \times c	9 s 29	22 $\overline{25}$ 31	22 n 4	4 $\overline{27}$ 35	20 s 6	13 $\overline{17}$ 33	22 s 28
7	10 40	9 13	21 52	22 11	9 17	18 58	20 57	21 43
13	11 23	8 57	21 16	22 17	14 0	17 41	28 22	20 41
19	12 7	8 40	20 46	22 22	18 43	16 16	5 $\overline{22}$ 48	19 16
25	12 51	8 24	20 21	22 27	23 27	14 47	13 14	17 31

M	☉'s		☉'s		Observations
D	Longit.	Decl.	Longit.	Decl.	
1	13 $\overline{22}$ 11	10 s 53			Pole Star south at 4h. 4m. afternoon
2	14 12	16 35			Day breaks at 5h. 28m.
3	15 13	16 18			Sun rises at 7h. 23m.
4	16 14	15 59			Day is 9h. 14m. long
5	17 14	15 41			
6	18 15	15 23			Seven Stars south at 6h. 10m. afternoon
7	19 16	15 4			Saturn sets at 6h. 41m. afternoon
D	20 16	14 45			Jupiter Sets at 6h. 10m. morning
9	21 17	14 25			Clock before the Sun 14m. 40 sec.
10	22 17	14 6			
11	23 18	13 46			Sun sets at 4h. 52m.
12	24 19	13 26			Day light ends at 6h. 46m.
13	25 19	13 6			Day is 9h. 52m. long
14	26 20	12 45			Day is increased 2h. 12m.
D	27 20	12 25			
16	28 20	12 4			Pole Star south at 3h. 4m. afternoon
17	29 21	11 43			Jupiter sets at 5h. 12m. morning
18	0 \times 21	11 21			☉ enters \times 3h. 28m. morning
19	1 22	11 0			
20	2 22	10 38			Mercury's greatest elongation
21	3 23	10 17			Seven Stars south at 5h. 12m. afternoon
D	4 23	9 55			Saturn sets at 5h. 53m. afternoon
23	5 23	9 33			Jupiter sets 5h. 9m. morning
24	6 24	9 11			
25	7 24	8 48			Day breaks at 4h. 50m.
26	8 24	8 26			Sun rises at 6h. 39m.
27	9 24	8 3			Sun sets at 5h. 22m.
28	10 24	7 40			Day light ends at 7h. 18m.

Lunations.						M	Jupiter	Venus
						D	fets	fets
First Quarter 4th day, at 11 night.						1	4m 45	5m 55
Full Moon 11th day, at 2 afternoon.						7	4 22	5 49
Last Quarter 18th day, at 2 afternoon.						13	4 c	5 43
New Moon 26th day, at 7 afternoon.						19	3 38	5 35
						25	3 16	5 25
M	W	Holy Days, Orises & fet	D riles & fets	D's Longit	D's Declin.	Aspects and Weather		
1	S	Sun. in Lent	10 a 39	0 8 42	14 n 10	<i>David</i>		
2	M	<i>Chad</i>	11 48	13 9	17 20	Begins with dark		
3	Tu		morn	25 51	19 45	♂ ☉ ♀		
4	W	Ember Week	0 54	8 11 52	21 11	gloomy weather.		
5	Th		1 53	22 14	21 28	Snow or rain, with		
6	F		2 46	6 26 120	29	stormy winds.		
7	S	<i>Perpetua</i>	3 33	20 15	18 12	Δ ♄ ♀		
8	D	2 Sun. in Lent	4 10	4 2 54	14 41	♂ ☉ ♀		
9	M		4 42	19 53	10 11	Δ ☉ ♄		
10	Tu		5 11	5 12 5	4 59	Blustering winds,		
11	W		D riles	20 19	0 s 32	cold rain and		
12	Th	<i>Gregory</i>	7 a 39	5 24	5 58	♂ ♀ ♀		
13	F		9 0	20 11	10 57	stormy weather.		
14	S		10 19	4 m 32	15 9			
15	D	3 Sun. in Lent	11 33	18 25	18 22			
16	M		morn	1 1 48	20 27	Now expect a		
17	Tu	<i>St. Patrick</i>	0 38	14 44	21 22	gentle frost.		
18	W	<i>Edm. K. W.S.</i>	1 32	27 17	21 9			
19	Th		2 16	9 13 33	19 56	♂ ♂ ♀, ♂ ♂ ♀, ♂		
20	F		2 55	21 30	17 50	[♀ ♀		
21	S	<i>Benedict</i>	3 26	3 30 15	0	Serene and fair, but		
22	D	Midlent Sun.	3 50	15 21 11	34	ends with cold		
23	M		4 1	27 11	7 42	foggy weather.		
24	Tu		4 34	9 3 5	3 32	♂ ♀ ♀		
25	W	Lady Day	4 53	21 3	0 n 48	Rough and stormy		
26	Th		D fets	3 7 5	9	♂ ♀ ♂, Δ ♄ ♀		
27	F		7 a 31	15 20	9 20	winds.		
28	S		8 39	27 40	13 10			
29	D	5 S. in Lent.	9 52	10 8 10	16 29	Dark and obscure		
30	M		10 54	22 51	19 5	skies, with rain or		
31	Tu		11 56	5 11 45	20 44	flect.		
						Δ ♄ ♂		

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declip.
1	13 20	8 s 12	20 20	10 22 n 27	25 36	13 s 42	18 11	16 s 11
7	14 4	7 56	19 57	22 29	1 10	12 3	25 36	13 58
13	14 47	7 40	19 52	22 30	6 2	10 20	3 1	11 31
1	15 32	7 22	19 52	22 30	10 45	8 34	10 27	8 53
25	16 14	7 7	20 02	22 26	15 2	6 45	17 52	6 7

M	☉'s		☉'s	Observations
	Longit.	Declin.		
D 1	11 25	7 s 18		Pole Star fouth at 2h. 15m. afternoon
2	12 25	6 55		Saturn sets at 5h. 29m. afternoon
3	13 25	6 32		Jupiter sets at 4h. 37m. morning
4	15 25	6 9		Clock is before the Sun 11m. 54sec.
5	15 25	5 45		
6	16 25	5 22		Seven Stars fouth at 4h. 24m. afternoon
7	17 24	4 59		Day breaks at 4h. 30m.
D 18	24 4	3 35		Sun rises at 6h. 20m.
9	19 24	4 12		Day is 11h. 24m. long
10	20 24	3 48		
11	21 24	3 25		Saturn rises at 6h. 9m. morning
12	22 23	3 1		Jupiter sets at 4h. 4m. morning
13	23 23	2 38		Sun sets at 5h. 50m.
14	24 23	2 14		Day light ends at 7h. 33m.
D 25	22 1	50		
16	26 22	1 27		Pole Star fouth at 1h. 20m. afternoon
17	27 22	1 3		Day breaks at 4h. 12m.
18	28 21	0 39		Sun rises at 6h. 0m.
19	29 21	0 16		
20	0 20	0 n 8		☉ enters ♍ 3h. 53m. morning
21	1 20	0 32		Seven Stars fouth at 3h. 29m. afternoon
D 2	19 0	55		Saturn rises at 5h. 37m. morning
23	3 18	1 19		Jupiter sets at 3h. 24m. morning
24	4 18	1 43		
25	5 17	2 6		Sun rises at 5h. 44m.
26	6 16	2 30		Sun sets at 6h. 18m.
27	7 16	2 53		Day light ends at 8h. 21m.
28	8 15	3 17		Clock is before the Sun 4m. 42sec.
D 9	14 3	40		
30	10 13	4 3		
31	11 12	4 26		

Lunations.						M D	Jupiter sets	Venus rises
First Quarter 3d day, at 8 morning						1	2m 52	5m 16
Full Moon 9th day, at 11 night						7	2 31	5 6
Last Quarter 17th day, at 8 morning						13	2 11	4 57
New Moon 25th day, at 10 morning						19	1 50	4 47
						25	1 31	4 27
M	W	Holy Days, Orises & sets	D rises & sets	D's Longit.	D's Declin.	Aspects and Weather		
1	W		morn	18 n 53	21 n 17	Sharp mornings.		
2	Th		0 51	22 18	20 39			
3	F	Richard	1 38	16 2	18 47	Ca. T.e. ♂ ♀		
4	S	St. Ambrose	2 16	0 5	15 46	Oxf. Term ends		
5	D	Palm Sunday	2 50	14 27	11 45	Old Lady Day		
6	M		3 19	29 4	6 58	Brisk winds and		
7	Tu		3 45	13 53	1 44	Δ ♄ ♀		
8	W		4 10	28 46	3 s 37	Seasonable showers.		
9	Th	Maundy Thurs.	D rises	13 33	8 45	□ ☉ ♄		
10	F	Good Friday	7 a 58	28 8	13 18	Mild rain about this time.		
11	S		9 16	12 m 23	16 59			
12	D	Easter Day	10 26	26 15	19 34	Afterwards cloudy		
13	M	Easter Monday	11 28	9 41	20 57	and frequent		
14	Tu	Easter Tuesday	morn	22 42	21 10	showers.		
15	W		0 19	5 21	20 16			
16	Th		1 0	17 41	18 24			
17	F		1 33	29 47	15 46	♂ ♂ ♀		
18	S		2 0	11 44	12 30	Fine pleasant spring		
19	D	Low Sunday	Alphege	23 37	8 46	weather; fair and		
20	M		2 46	5 29	4 42	mild.		
21	Tu		3 5	17 25	0 26	□ ♄ ♀		
22	W	Ox. & Ca. T. be.	3 24	29 27	3 n 54			
23	Th	St. George	3 45	11 40	8 8	But towards the end		
24	F	[Mary b.]	4 6	24 3	12 6	expect some storms		
25	S	St. Mark. Prs.	D sets	6 39	15 36			
26	D	2 S. aft. Easter	8 a 50	19 27	18 25	of rain; or hail and		
27	M		9 56	2 29	20 20	brisk gales of wind.		
28	Tu		10 53	15 44	21 9			
29	W	Easter T. beg.	11 43	29 11	20 47	□ ♄ ♀		
30	Th		morn	12 51	19 11			

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	17 4	6 s 47	20 25 17	22 n 27	20 56	4 s 35	26 31	2 s 45
7	17 44	6 32	20 39 22	22 22	25 36	2 43	38 5	0 n 12
13	18 24	6 18	21 7 22	19 19	0 16	0 51	11 15	3 9
19	19 2	6 4	21 41 22	14 4	54 1 n 1	18 43	6 4	8 54
25	19 38	5 50	22 20 22	8 9	31 2	52 26	7 8	54

M	☉'s		☉'s	Observations
	Longit.	Declin.		
1	12 11	4 n 49		Pole Star south at oh. 20m. afternoon
2	13 10	5 12		Saturn rises at 4h. 55m. morning
3	14 9	5 35		Jupiter sets at 2h. 45m. morning
4	15 8	5 58		Mercury's greatest elongation
L 16	7 6	21		
6	17 6	6 44		Seven Stars south at 2h. 31m. afternoon
7	18 5	7 6		Day breaks at 3h. 18m.
8	19 4	7 28		Sun rises at 5h. 18m.
9	20 3	7 51		Clock is before the Sun 1m. 26sec.
10	21 1	8 13		
11	22 0	8 35		Saturn rises at 4h. 24m. morning
D 22	59 8	57		Jupiter sets at 2h. 14m. morning
13	23 57	9 18		Sun sets at 6h. 51m.
14	24 56	9 40		Day light ends at 9h. 2m.
15	25 55	10 1		
16	26 53	10 22		Pole Star south at
17	27 52	10 43		Day is 13h. 58m. long
18	28 50	11 4		Clock after the Sun om. 53sec.
D 29	49 11	25		☉ enters 8 4m. 38m. afternoon
20	0 8 47	11 46		
21	1 46	12 6		Seven Stars south at 1h. 55m. afternoon
22	2 44	12 26		Day breaks at 2h. 35m.
23	3 42	12 46		Sun rises at 4h. 50m.
24	4 41	13 6		Day is increased 6h. 40m.
25	5 39	13 25		
D 6	37 13	44		Saturn rises at 3h. 32m. morning
27	7 36	14 4		Jupiter sets at 1h. 24m. morning
28	8 34	14 22		Sun sets at 7h. 19m.
29	9 32	14 41		Day light ends at 9h. 51m.
30	10 30	14 59		

Lunations.			M D	Jupiter sets	Venus sets
First Quarter	2d day, at 3 afternoon.		1	1 m 1 c	4 m 27
Full Moon	9th day, at 9 morning.		7	0 50	4 18
Last Quarter	17th day, at 2 morning.		13	0 29	4 10
New Moon	24th day, at 10 night.		19	0 8	4 3
First Quarter	31st day, at 8 night.		25	11 47	3 59

M D	W D	Holy Days, O rises & sets	D rises & sets	D's Longit.	D's Declin.	Aspects and Weather
1	F	St. Phil. & Jam.	0 m 23	20 54 43	10 n 20	Fine showers toward the beginning.
2	S		0 57	10 54 46	12 43	
3	D	3 Sun. af. East.	1 27	24 59	8 15	<i>Inv. of the Crofs</i>
4	M		1 53	9 m 20	3 17	Afterward high wind
5	Tu		2 17	23 45	1 54	and dark drizzling
6	W	J. Ev. a. P. L.	2 42	8 10	6 59	weather Then more
7	Th		3 7	22 30	11 39	mild, fair, and
8	F		3 37	6 m 41	15 3	pleasant.
9	S		D rises	20 36	18 38	
10	D	4 Sun. af. East.	9 a 17	4 f 15	20 30	* ○ h
11	M		10 12	17 33	21 10	♂ ♀ ♀
12	Tu	Old May Day	10 56	0 h 31	20 39	* h ♀
13	W		11 35	13 11	19 7	Sudden showers;
14	Th		morn	25 33	16 41	♂ ○ ♀, * ○ ♀, }
15	F		0 5	7 m 42	13 35	* h ♀, □ ♀, }
16	S		0 27	19 41	9 5	* ♀, }
17	D	Rogation Sun.	0 51	1 h 35	5 59	perhaps attended with Thunder,
18	M		1 10	13 29	1 47	
19	Tu	Q. Charl. born	1 30	25 26	2 n 31	<i>Dunstan, * ♀</i>
20	W		1 50	7 m 32	6 40	
21	Th	Ascension	2 11	19 50	10 50	then more serene
22	F	Prs. Eliza. bo.	2 36	2 8 22	14 30	Afterwards dark and
23	S		3 4	15 11	17 35	cloudy, with sudd showers of rain or
24	D	S. aft. Ascen.	D sets	28 10	19 49	hail.
25	M	Easter T. ends	8 a 52	11 n 4	21 1	
26	Tu	Augustin Abp.	9 39	25 23	21 0	Weather
27	W	Ven. Bede	10 23	9 m 17	19 42	□ h ♀
28	Th	Oxf. Ter. ends	10 59	23 21	17 11	inclined to heat.
29	F	K. Cha. II. reft.	11 30	7 3	13 38	
30	S		11 57	21 4	9 10	♂ ○ ♀
31	D	Whit Sunday	morn	6 m 4	4 26	

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Declin.	Long.	Declin.	Long.	Declin.	Long.	Declin.
1	20 36	12 53	23 25	5 22	14 17	7 43	3 30	11 37
7	20 44	5 27	23 54	21 52	18 41	6 30	10 53	14 11
13	21 13	5 16	24 47	21 43	23 14	8 15	18 16	16 32
19	21 40	5 7	25 44	21 33	27 45	9 56	25 38	18 38
25	22 4	4 59	26 45	21 21	28 14	11 33	31 1	20 27

M	Sun's Longit.	Sun's Declin.	Observations
1	11 8 28	15 17	Moon eclipsed, invisible
2	12 26	15 35	Day breaks at 2 h. 1 minute
D 13	24 15	53	Sun rises at 4 h. 32 minutes
4	14 22	16 10	Clock is after the Sun 3 m. 31 seconds
5	15 20	16 27	
6	16 18	16 44	Pole Star south, at 10 h. 11 m. morning
7	17 16	17 1	Saturn rises at 2 h. 51 min. morning
8	18 14	17 17	Jupiter sets at 0 h. 47 min. morning
9	19 12	17 33	Day is increased 7 h. 32 minutes
D 20	10 17	48	
11	21 8	18 4	Seven Stars south, at 0 h. 19 m. afternoon
12	22 5	18 19	Sun sets at 7 h. 42 minutes
13	23 3	18 33	Twilight ends at 10 h. 44 minutes
14	24 1	18 48	Clock is after the Sun 4 min. 1 second
15	24 59	19 2	
16	25 57	19 16	Saturn rises at 2 h. 16 min. morning
D 26	54 19	29	Jupiter sets at 0 h. 15 min. morning
18	27 52	19 42	Day is 15 h. 42 min. long
19	28 50	19 55	
20	29 47	20 8	☉ enters ♏ 5 h. 13 min. afternoon
21	0 ♏ 45	20 20	Pole Star south at 9 h. 13 min. morning
22	1 43	20 32	Clock is after the Sun, 3 min. 42 seconds
23	2 40	20 43	
D 3	38 20	54	Sun eclipsed, invisible.
25	4 36	21 5	
26	5 33	21 15	Seven Stars south at 11 h. 40 min. morn.
27	6 31	21 25	Sun sets at 8 h. 3 minutes.
28	7 28	21 35	No real Night, but
29	8 26	21 44	All Day or Twilight, till July 22.
30	9 23	21 53	
D 10	21 22	1	

Lunations						M	Jupiter	Venus
						D	sets	sets
Full Moon the 7th day, at 8 night						1	11 a 22	8 a 9
Last Quarter the 15th day, at 7 night						7	11 o	8 23
New Moon the 23d day, at 8 morning						13	10 39	8 36
First Quarter the 29th day, at 12 night						19	10 18	8 44
						25	9 56	8 50
M	W	Holy Days	D rises	Moon's	Moon's	Aspects and		
D	D	Sun rises & sets	& sets	Longit.	Declin.	Weather		
1	M	Whit Mond.	o m 21	20 17	o s 39	Nicomede		
2	T	Whit Tues.	o 46	4 26	5 41	Fine warm serene		
3	W	Ember Week	1 10	18 28	10 23	& pleasant wea-		
4	T	K. G. III. b.	1 36	2 m 21	14 29	ther		
5	F	Pr. Er. Au. b.	2 7	16 3	17 45	Boniface		
6	S		2 43	29 34	19 59	About this time		
7	D	Trinity Sun.	D rises	12 4	51 21	thunder in some		
8	M		8 a 47	25 53	20 59	places, with hail,		
9	T		9 29	8 40	19 48	or rain.		
10	W	Oxf. T. beg.	10 2	21 13	17 40	□ h ♀		
11	T	St. Barnabas	10 29	3 32	14 46	Corpus Christi		
12	F	Trin. T. beg.	10 52	15 39	11 17	[* ♂ ♀]		
13	S		11 12	27 39	7 23	□ ☉ h		
14	D	S. aft. Trin.	11 31	9 33	3 14			
15	M		11 50	21 26	1 n 1	Good agreeable		
16	T		morn	3 23	5 16	weather, with		
17	W	St. Alban.	o 10	15 29	9 23	now & then some		
18	T		o 33	27 48	13 11	Δ h ♀		
19	F		o 59	10 8 25	16 29	brisk winds and		
20	S	Tr. Ed. KWS	1 30	23 22	19 4	showers		
21	D	S. aft. Trin.	2 9	6 41	20 42	Longest day		
22	M		2 58	20 24	21 9	* h ♂		
23	T		D sets	4 28	20 19	Gentle breezes		
24	W	Nativ. J. Bap.	8 a 51	18 49	18 10	Midsummer		
25	T		9 28	3 21	14 51	with thunder		
26	F		9 56	17 59	10 36	showers		
27	S		10 21	2 34	5 45	Towards the end		
28	D	S. aft. Trin.	10 45	17 2	0 37	calm and sultry.		
29	M	St. Peter	11 9	1 19	4 s 29			
30	T		11 34	15 21	9 17	* ♂ ♀		

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	22 28	4 51	27 59	21 n 7	7 25	13 n 21	11 13	7 22 n 8
7	22 45	4 45	29 6	20 53	11 50	14 48	18 59	23 11
13	22 59	4 41	31 16	20 38	16 12	16 10	26 22	23 49
19	23 9	4 39	1 27	20 23	20 33	17 26	32 44	24 2
25	23 16	4 37	3 40	20 7	24 51	18 35	11 7	23 50

M	Sun's		Sun's		Observations	
D	Longit.	Decl.				
1	11 18	22 n 10			Pole Star south at 8 h. 28 min. morning	
2	12 15	22 17			Saturn rises at 1 h. 10 min. morning	
3	13 13	22 25			Jupiter sets at 11 h. 15 min. afternoon	
4	14 10	22 32			Day is 16 h. 20 min. long	
5	15 8	22 38				
6	16 5	22 44			Seven Stars south at 10 h. 35 m. morning	
D 17	2 22	50			Sun rises at 3 h. 48 minutes	
8	18 1	22 55			Sun sets at 8 h. 13 minutes.	
9	18 57	23 0			Clock is after the Sun 1 min. 10 seconds	
10	19 54	23 5				
11	20 51	23 9			Saturn rises at 0 h. 34 m. morn.	
12	21 49	23 13			Jupiter sets at 10 h. 42 m. afternoon	
13	22 46	23 16			Day is increased 8 h. 48 min.	
D 23	43 23	19			Day is 16 h. 52 min. long	
15	24 40	23 21				
16	25 38	23 24			Pole Star south at 7 h. 29 min. morning	
17	26 35	23 25			Mercury's greatest elongation	
18	27 32	23 27			Sun rises at 3 h. 43 minutes	
19	28 30	23 27			Sun sets at 8 h. 17 minutes	
20	29 27	23 28				
D 0 24	23 28	28			☉ enters 23 1 h. 55 min. morning	
22	1 21	23 27			Saturn rises at 11 h. 50 min. afternoon	
23	2 19	23 27			Jupiter sets at 10 h. 4 min. afternoon	
24	3 16	23 25			Day is 16 h. 34 minutes long	
25	4 13	23 24				
26	5 10	23 22			Seven Stars south at 9 h. 33 min. morn.	
27	6 7	23 19			Sun rises at 3 h. 44 minutes	
D 7	5 23	17			Sun sets at 8 h. 16 minutes	
29	8 2	23 13			Clock is before the Sun 3 m. 2 seconds.	
30	8 59	23 10				

Lunations					M	Jupiter	Venus
					D	sets	sets.
Full Moon the 7th day, at 9 morning					1	9 2 34	8 2 52
Last quarter the 15th day, at 11 morning					7	9 13	8 52
New Moon the 22d day, at 4 afternoon					13	8 52	8 50
First Quarter the 29th day, at 6 morning					19	8 31	8 44
					25	8 10	8 37
M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and	
D	D	Sun rises & sets	& sets	Longit.	Declin.	Weather	
1	W	Trin. Terme.	morn.	29	9 13 31	Fine weather	
2	T	Visit. V. M.	0 6	12	43 16	and pleasant,	
3	F	Dog-Da. beg.	0 37	26	3 19 27		
4	S	Transf. St. M.	1 18	9	10 20 50	△ ♀ ♀	
5	D	4 S. aft. Trin.	2 10	22	4 21 7	Old Midsummer	
6	M		3 2	4	47 20 17	perhaps some.	
7	T	Tho. a Becket	D rises	17	19 18 28	thunder showers	
8	W	[Camb. com.	8 2 25	29	41 15 49	♂ ♀ ♂	
9	T		8 50	11	52 12 31	about this time.	
10	F	C. T. ends.	9 12	23	55 8 45	* ♀ ♂	
11	S		9 32	5	52 4 41	Brisk winds	
12	D	5 S. aft. Trin.	9 50	17	44 0 28	and sudden	
13	M	Oxford Aft	10 11	29	36 3 47	showers of	
14	T		10 31	11	31 7 54	♂ ☉ ♂, △ ♀ ♂	
15	W	Swithin	10 55	23	35 11 46	hail or rain.	
16	T		11 24	5	52 15 13	△ ☉ ♀	
17	F		11 58	18	27 18 4	♂ ♀ ♀	
18	S	Oxf. T. ends	morn.	1	25 20 4	Hot dry and salt.	
19	D	6 S. aft. Trin.	0 42	14	49 21 2	* ♂ ♀	
20	M	Margaret	1 36	28	40 20 46		
21	T		2 42	12	58 19 11	Windy with sud-	
22	W	Magdalen	D sets	27	39 16 19	den showers.	
23	T		7 2	54	12 34 20		
24	F		8 22	27	36 7 35	Afterward calm	
25	S	St. James	8 48	12	34 2 22	and agreeable.	
26	D	7 S. aft. Trin.	9 11	27	20 2 54	St. Anne.	
27	M		9 37	11	48 7 55		
28	T		10 6	25	55 12 23		
29	W		10 38	9	46 16 4	Some gentle	
30	T		11 17	23	4 18 48	showers toward	
31	F		morn.	6	10 20 28	the end.	

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M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	23 19	4 38	3 56	19 50	2 8 6	19 37 18	2 29	23 12
7	23 19	4 39	5 12	19 32	3 12 0	20 33 25	51	22 10
13	23 15	4 42	6 30	19 13	7 30	21 22	3 13	20 45
19	23 8	4 46	7 48	18 54	11 38	22 4	10 36	18 58
25	22 57	4 52	9 7	18 34	15 44	22 38	17 58	16 52

M	Sun's		Sun's		Observations			
D	Longit.	Declin.						
1	9 56	23 6			Pole Star south, at 6 h. 25 min. morning			
2	10 53	23 1			Saturn rises at 11 h. 9 min. afternoon			
3	11 51	22 56			Jupiter sets at 9 h. 27 min. afternoon			
4	12 48	22 51			Clock is before the Sun 3 min. 58 sec.			
D	13 4	22 45						
6	14 42	22 39			Seven Stars south at 8 h. 32 min. morning			
7	15 39	22 33			Sun rises 3 h. 49 minutes			
8	16 37	22 26			Sun sets 8 h. 10 minutes			
9	17 34	22 19			Day is decreased 16 min.			
10	18 31	22 11						
11	19 28	22 3			Saturn rises at 10 h. 31 min. afternoon			
D	20 25	21 55			Jupiter sets at 8 h. 55 min. afternoon			
13	21 23	21 46			Day is 16 h. 10 min. long			
14	22 20	21 37			Clock is before the Sun 5 m. 24 seconds			
15	23 17	21 27						
16	24 14	21 17			Pole Star south at 5 h. 24 min. morning			
17	25 12	21 7			Sun rises at 3 h. 59 minutes			
18	26 9	20 57			Sun sets at 8 h. 0 minutes			
D	27 6	20 46			Day is decreased 38 minutes			
20	28 4	20 34						
21	29 1	20 23			Seven Stars south at 7 h. 31 m. morning			
22	29 58	20 11			☉ enters ♏ 0 h. 44 minutes afternoon			
23	0 56	19 58			Saturn rises at 9 h. 52 m. afternoon			
24	1 53	19 46			Jupiter sets at 8 h. 14 min. afternoon			
25	2 50	19 33						
D	3 4	19 19						
17	4 45	19 6			Day breaks at 0 h. 57 min.			
28	5 43	18 52			Sun rises at 4 h. 14 minutes			
29	6 40	18 3			Sun sets at 7 h. 45 minutes			
30	7 37	18 25			Day light ends at 10 h. 46 minutes			
31	8 35	18 8						

Lunations				M. Jupiter		Venus	
				D. rises		sets	
Full Moon 5th day, at 10 night				1	4 m 23	8 a 26	
Last Quarter the 14th day, at 2 morning				7	4 6	8 17	
New Moon the 20th day, at 11 night				13	3 30	8 7	
First Quarter 27th day, at 3 afternoon				19	3 35	7 56	
				25	3 20	7 46	
M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and Weather	
D	D	☉ rises & sets	& sets	Longit.	Declin.		
1	S	Lammas Day	om 2	19 f	1 21 8	52	Pleasant weather.
2	D	S. aft. Trin.	0 55	17 38	20 30	6 0 24	
3	M		1 53	14 4	18 58	Δ 7 8	
4	T		2 55	26 22	16 36	□ 7 8	
5	W		D rises	8 32	13 31	Hail, and thun-	
6	T	Transfigur.	7 a 17	20 34	9 55	er now about.	
7	F	Prs Amelia b.	7 38	2 32	5 57	Name of Jesus.	
8	S		7 58	14 25	1 48		
9	D	S. aft. Trin	8 17	26 16	2 n 25	Stormy and tem-	
10	M	St Lawrence	8 38	8 7	6 33	pestuous	
11	T	Ps. Brunsw. b	9 0	20 1	10 27	Dog days end	
12	W	Pr. Wales b.	9 28	2 8	13 59	Old Lammas.	
13	T		9 59	14 18	16 58	Ruffling wind	
14	F		10 40	26 49	19 14	& hasty showers.	
15	S	Assumption	11 26	9 43	20 35		
16	D	10 S. aft. Tr.	morn. 23	3 20	51	D. of York born.	
17	M		0 23	6 53	19 52	6 24 8	
18	T		1 32	21 12	17 37	More serene and	
19	W		2 50	5 58	14 11	hot and dry.	
20	T		3 fets	21 4	9 45		
21	F	Pr. W. H. b.	6 a 50	6 20	4 40	8 7 8	
22	S		7 18	21 35	0 43		
23	D	11 S. aft. Tr.	7 44	6 38	5 59	Windy with fly-	
24	M	St. Bartholo.	8 12	21 21	0 47	ing showers.	
25	T		8 43	5 38	14 50		
26	W		9 22	19 29	17 55		
27	T		10 7	2 54	19 54	Seasonable.	
28	F	St. Augustine	10 57	15 57	20 45	6 0 8	
29	S	Beh. John Bap.	11 53	28 40	20 31	Fair and warm.	
30	D	12 S. aft. Tr.	morn. 11	7 19	15	* 8 8	
31	M		0 54	23 23	17 7		

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	22 40	5 8	10 39	18 9	20 11	28 9	26 35	14 4
7	22 23	5 8	11 58	17 48	24 27	23 28	3 56	11 26
13	22 2	5 17	13 17	17 26	28 24	23 39	11 18	8 37
19	21 40	5 27	14 36	17 4	2 18	23 44	18 40	5 40
25	21 15	5 38	15 54	16 41	6 8	23 42	26 1	2 38

M	Sun's		Sun's		Observations
D	Longit.	Declin.	Longit.	Declin.	
1	9 32	17 53			Pole Star south at 4 h. 20 min. morning
D 10	30	17 38			Saturn rises at 9 h. 3 min. afternoon
3	11 27	17 22			Jupiter rises at 4 h. 17 min. morning
4	12 25	17 6			Mercury's greatest elongation
5	13 22	16 50			
6	14 20	16 33			Seven Stars south at 6 h. 28 min. morning
7	15 17	16 16			Day breaks at 1 h. 47 min.
8	16 15	15 59			Sun rises at 4 31 minutes
D 17	12 15	42			Day is decreased 1 h. 41 min.
10	18 10	15 24			
11	19 7	15 6			Saturn rises at 8 h. 24 min. afternoon
12	20 5	14 48			Jupiter rises at 3 h. 53 min. morning
13	21 3	14 30			Sun sets at 7 h. 20 min.
14	22 0	14 11			Twilight ends at 9 h. 46 min.
15	22 58	13 53			
D 23	56	13 33			Pole Star south at 3 h. 23 m. morning
17	24 54	13 14			Clock is before the Sun 3 m. 37 seconds
18	25 51	12 55			Day breaks at 2 h. 22 min.
19	26 49	12 35			Sun rises at 4 h. 51 min.
20	27 47	12 15			
21	28 45	11 55			Seven Stars south at 5 h. 31 min.
22	29 43	11 35			Sun enters 7 h. 3 min. afternoon
D 0	41 11	15			Saturn rises at 7 h. 43 min. afternoon
24	1 39	10 54			Jupiter rises at 3 h. 23 min. morning
25	2 37	10 33			
26	3 35	10 12			
27	4 33	9 51			Day breaks at 2 h. 53 min.
28	5 31	9 30			Sun rises at 5 h. 8 min.
29	6 29	9 9			Sun sets at 6 h. 51 min.
D 7	27 8	47			Twilight ends at 8 h. 58 min.
31	8 25	8 25			

Lunations						M	Jupiter	Venus
						D	rises	sets
Full Moon the 4th day, at 2 afternoon						1	3 m 4	7 a 33
Last Quarter the 12th day, at 3 afternoon						7	2 49	7 22
New Moon the 19th day, at 7 morning						13	2 34	7 12
First Quarter the 26th day, at 4 morning						19	2 21	7 2
						25	2 6	6 52
M	W	Holy Days	D rises	Moon's	Moon's	Aspects and		
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather		
1	T	Wiles	1 m 59	5 m 30	14 s 15	Dark air, high		
2	W	Lon. b. 1666.	3 5	17 31	10 50	winds, and hasty		
3	T		4 10	29 27	7 0	showers.		
4	F		D rises	11 20	2 56	* ☉ ♂		
5	S		6 a 30	23 12	1 n 14	8 h ♀		
6	D	13 S. aft. Tr.	6 52	5 v 3	5 22	More calm and		
7	M	Enurhus.	7 15	16 57	9 19	mild.		
8	T	Nat. B. V. M.	7 39	28 54	12 55	Rain and turbu-		
9	W		8 9	10 8 59	16 1	lent winds.		
10	T		8 45	23 15	18 26	☐ ♂ ♀		
11	F		9 28	5 II 46	20 2	8 ☉ h		
12	S		10 21	18 37	20 39	More pleasant		
13	D	14 S. aft. Tr.	11 25	12 51	20 8	* ♃ ♀		
14	M	Holy Crofs.	morn	15 33	18 26	and serene.		
15	T		0 36	29 43	15 36	Δ h ♂		
16	W	Ember Week	1 52	14 20	11 42			
17	T	Lambert.	3 15	29 19	7 0	Sudden showers.		
18	F		4 38	14 m 33	1 47	with some wind,		
19	S		D sets	29 50	3 s 34	afterwards dark		
20	D	15 S. aft Tr.	6 a 21	15 Δ 0	8 40	and drifling.		
21	M	St. Matthew.	6 52	29 53	13 8			
22	T	K. Geo. III. c.	7 28	14 m 21	16 41			
23	W		8 10	28 22	19 8	The month seems		
24	T		9 0	11 f 55	20 22	to conclude with		
25	F		9 56	25 2	20 27	* ♃ ♀		
26	S	St. Cypran	10 57	7 h 46	19 27	rough winds and		
27	D	16 S. aft. Tr.	morn	20 12	17 33	udden showers.		
28	M		0 1	2 m 24	14 52	☐ ♂ ♀		
29	T	St. Michael	1 7	14 26	11 37	Prs. Ch. Au. Mb.		
30	W	St. Jerome.	2 12	26 22	7 56			

M.	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Dec.	Long.	Decl.
1	20 44	5 51	17 23	16 15	10 32	23 32	4 35	0 59
7	20 17	6 21	39 15	52 14	16 23	17 21	55 4	5
13	19 49	6 13	19 53	15 30	17 55	22 6	19 15	7 8
19	19 22	6 24	21 41	5 8	21 30	22 31	26 34	10 6
25	18 55	6 35	22 14	14 46	25 1	22 2	31 52	12 57

M.	Sun's	Sun's	Observations	
D	Longit.	Declin.		
1	9 23	8 n	3	Pole star south at 2 h. 24 min. morning
2	10 21	7 42		Saturn rises at 7 h. 6 min. afternoon
3	11 20	7 19		Jupiter rises at 2 h. 59 m. morning
4	12 18	6 57		Clock is after the Sun 1 m. 22 seconds
5	13 16	6 35		
D 14	14 6	13		Seven stars south at 4 h. 33 min. morning
7	15 13	5 50		Day breaks at 3 h. 23 min.
8	16 11	5 27		Sun rises at 5 h. 29 min.
9	17 9	5 5		Day is decreased 3 h. 36 min.
10	18 8	4 42		
11	19 6	4 19		Saturn rises at 6 h. 31 min. afternoon
12	20 5	3 56		Jupiter rises at 2 h. 37 min. morning
D 21	3 3	33		Sun sets at 6 h. 22 min.
14	22 2	3 10		Twilight ends at 8 h. 19 min.
15	23 0	2 47		
16	23 59	2 24		Pole star south at 1 h. 30 min. morning
17	24 58	2 0		Clock is after the Sun 5 min. 50 seconds
18	25 56	1 37		Day is decreased 4 h. 10 min.
19	26 55	1 14		Day is 12 h. 20 min. long
D 27	54 0	50		
21	28 53	0 27		Seven stars south at 3 h. 40 min. morning
22	29 51	0 3		Sun enters 3 h. 28 min. afternoon
23	0 50	0 20		Saturn sets at 4 h. 49 min. morning
24	1 49	0 44		Jupiter rises at 2 h. 8 m. morning
25	2 48	1 7		
26	3 47	1 30		Day breaks at 4 h. 8 min.
D 4	46 1	54		Sun rises at 6 h. 6 min.
28	5 45	2 17		Sun sets at 5 h. 52 min.
29	6 44	2 41		Twilight ends at 7 h. 46 min.
30	7 43	3 4		

Lunations				M	Jupiter	Venus
				D	rises	sets
Full Moon the 4th day at 7 morning				1	1 m 50	6 a 44
Last Quarter the 12th day, at 2 morning				7	1 34	6 36
New Moon the 18th day, at 4 afternoon				13	1 17	6 20
First Quarter the 25th day, at 8 night				19	1 0	6 36
				25	0 43	6 23
M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather
1	T	Remigius	3 m 17	8 14	3 s 57	Brisk winds, and
2	F		4 21	20 1	on 10	temperate rain.
3	S		5 25	1 58	4 18	
4	D	17 S. aft. Tr.	D rises	13 54	8 17	
5	M		5 a 53	25 55	11 59	Wind and rain
6	T	Faith	6 22	8 8	11 15	continues.
7	W		6 55	20 16	17 47	☐ h ♀
8	T		7 35	2 42	19 34	Cloudy with
9	F	St. Denys	8 24	15 20	20 25	rain.
10	S	Ox. & Ca. T. b.	9 21	28 15	20 12	Old Michaelmas
11	D	18 S. aft. Tr.	10 29	11 29	18 53	High winds with
12	M		11 40	25 4	16 28	☐ 24 ♀
13	T	Tr. K Ed. Con.	morn	9 13	3 13	Snow or sleet.
14	W		0 59	23 24	8 48	Afterwards more
15	T		2 19	8 5	3 57	Δ h ♀
16	F		3 40	23 0	14 14	* ♀ ♀
17	S	Etheldred	5 2	8 2	6 23	calm & pleasant.
18	D	19 S. aft. Tr.	D sets	23 2	11 8	St. Luke, * ☉ 24
19	M		5 a 29	7 m 51	15 8	
20	T		6 10	22 21	18 7	Thick cold clou-
21	W		6 56	6 28	19 53	dy weather, with
22	T		7 51	20 8	20 25	rain or snow.
23	F		8 52	3 22	19 46	
24	S		9 56	16 12	18 6	
25	D	20 S. aft. Tr.	11 0	28 42	15 37	K. G. III. ac.
26	M	K. Geo. & H. p.	morn	10 55	12 30	[Crispin
27	T		0 6	22 57	8 54	Δ ♂ ♀
28	W	St. Si. & Jude	1 12	4 51	5 0	Rough winds ap-
29	T		2 15	16 42	0 56	pear to conclude
30	F		3 20	28 34	3 n 11	Δ h ♀
31	S		4 25	10 30	7 12	the month.

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	18 29	6 45	23 22	14 25	28 27	21 29	11 9	15 37
7	18 5	6 54	24 26	14 4	1 49	20 52	18 26	18 4
13	17 43	7 2	25 27	13 45	5 4	20 13	25 42	20 14
19	17 23	7 9	26 24	13 26	8 14	19 32	2 56	22 6
25	17 6	7 15	27 18	13 9	11 17	18 50	10 10	23 37

M	Sun's		Sun's		Observations			
D	Longit.	Declin.						
1	8 42	3 s	27		Pole Star south at 0 h. 37 min. morning			
2	9 41	3	51		Saturn sets at 4 h. 13 m. morning			
3	10 41	4	14		Jupiter rises at 1 h. 44 min. morning			
D 11	40	4	37		Clock is after the Sun 11 m. 27 sec.			
5	12 39	5	0					
6	13 38	5	23		Seven Stars South at 2 h. 46 min. morning			
7	14 37	5	46		Day breaks at 4 h. 31 min.			
8	15 37	6	9		Sun rises at 6 h. 28 min.			
9	16 36	6	32		Day is decreased 5 h. 34 min.			
10	17 36	6	55					
D 18	35	7	17		Saturn sets at 3 h. 37 min. morning			
12	19 35	7	40		Jupiter rises at 1 h. 20 min. morning			
13	20 34	8	3		Mercury's greatest elongation			
14	21 34	8	25		Day is 10 hours 42 minutes long			
15	22 33	8	47					
16	23 33	9	9		Pole Star South at 11 h. 41 min. afternoon			
17	24 33	9	31		Sun sets at 5 h. 15 min.			
D 25	32	9	53		Twilight ends at 7 h. 6 min.			
19	26 32	10	15		Clock is after the Sun 15 min. 2 seconds			
20	27 32	10	36					
21	28 32	10	58		Seven Stars south at 1 h. 50 min. morning			
22	29 32	11	19		☉ enters ♍ 11 h. 24 min. afternoon			
23	0 m 31	11	40		Saturn sets at 2 h. 48 min. morning			
24	1 31	12	1		Jupiter rises at 0 h. 46 min. morning			
D 2	31	12	22					
26	3 31	12	42		Day breaks 5 h. 8 min.			
27	4 31	13	2		Sun rises at 7 h. 4 min.			
28	5 31	13	23		Sun sets 4 h. 54 min.			
29	6 31	13	42		Twilight ends at 6 h. 48 min.			
30	7 31	14	2					
31	8 31	14	22					

Lunations						M Jupiter	Venus
						D rises	sets
Full Moon the 2d day, at 12 night						1 0m22	6 a 22
Last Quarter the 10th day, at 10 morn.						7 0 2	6 25
New Moon 17 day at 3 morning						13 11 24	6 30
First Quarter the 24th day, at 4 aftern.						19 11 19	6 39
						25 10 56	6 49
M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and	
D	D	Oriles & sets	& sets	Longit	Declin.	Weather	
1	D	21 S. aft. Tr.	5 m 30	22 V 32	10 59	All Saints.	
2	M	Pr. Edward b.	11 10	4 8 42	14 21	AliSoul. Δ h ♀	
3	T	Prs. Sophia b.	5 a 1	17 3	17 9	□ δ ♀	
4	W		5 38	29 34	19 10	Cold winterly	
5	T	Powder ploe	6 25	12 II 18	20 14	δ ○ ♀	
6	F	Leonard	7 19	25 15	20 16	Mich. T. beg.	
7	S	Dof Cumb.b.	8 21	8 25	19 12	weather.	
8	D	22 S. aft. Tr.	9 32	21 49	17 3	Prs. Aug. So.	
9	M	Ld. May. day	10 46	5 Ω 29	13 56	[Δ ○ h	
10	T		morn	19 23	9 59	□ ○ δ, Δ 2 ♀	
11	W	St. Martin	0 3	3 m 32	5 26	Dark and cloudy,	
12	T		1 21	17 53	0 31	with snow, fleet	
13	F	Britius	2 41	2 Δ 23	4 30	or cold rain.	
14	S		4 1	16 58	9 18	Then expect	
15	D	23 S. aft. Tr.	5 22	1 m 33	13 33	Machutus.	
16	M		6 40	16 21	16 57	sharp wind.	
17	T	Hugh Bp. Lin.	D sets	0 f 19	19 15	Dark, foggy, and	
18	W		5 a 34	14 19	20 19	unsettled. Then	
19	T		6 33	27 58	20 9	more mild.	
20	F	Edm. K. & M.	7 37	11 15	18 51		
21	S		8 42	24 8	16 36	□ ○ 2	
22	D	24 S. aft. Tr.	9 49	6 m 42	13 37	Cecilia, Old Ma.	
23	M	St. Clement	10 55	18 59	10 36	* h ♀	
24	T		morn	1 X 2	6 17	Frost and snow.	
25	W	D. of Glou. b.	0 0	12 57	2 14	Catherine.	
26	T		1 4	24 48	1 n 53	Δ h ♀.	
27	F		2 7	6 V 41	5 56	Story with	
28	S	Mit. Fer ends	3 11	18 38	9 48	rough winds	
29	D	Advent Sund	4 16	0 8 45	13 20		
30	M	St Andrew.	5 21	13 5	16 20	Rain or snow.	

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	16 51	7 20	28 15	12 51	14 41	18 1	18 34	24 53
7	16 42	7 22	28 59	12 37	17 27	17 19	25 44	25 32
13	16 36	7 24	29 37	12 24	20 3	16 39	2 52	25 44
19	16 34	7 24	om 10	12 14	22 29	16 1	9 58	25 30
25	16 36	7 21	0 37	12 6	24 42	15 27	17 1	24 50

M	Sun's		Sun's		Observations
D	Longit.	Declin.	Longit.	Declin.	
D	9m 32	14 8 41			Pole Star south at 10 h. 37 m. afternoon
2	10 32	15			0 Moon eclipsed, visible
3	11 32	15			19 Saturn sets at 2 h. 3 min. morning
4	12 32	15			37 Jupiter rises at 0 h. 8 m. morning
5	13 32	15			55
6	14 33	16			13 Seven Stars south at 0 h. 44 min. morning
7	15 33	16			31 Day breaks at 5 h. 25 min.
D	16 33	16			48 Sun rises at 7 h. 25 min.
9	17 34	17			5 Clock is after the Sun 15 m. 53 second
10	18 34	17			22
11	19 35	17			39 Pole Star south at 9 h. 57 min. afternoon
12	20 35	17			55 Saturn sets at 1 h. 26 min. morning
13	21 36	18			11 Jupiter rises at 11 h. 41 min. afternoon
14	22 36	18			26 Day is decreased 7 h. 43 min.
D	23 37	18			42
16	24 37	18			57 Sun eclipsed, invisible
17	25 38	19			11 Sun sets at 7 h. 40 min.
18	26 39	19			26 Twilight ends at 6 h. 20 min.
19	27 39	19			39 Day is 8 h. 36 min. long
20	28 40	19			53
21	29 41	20			6 ☉ enters ♄ 7 h. 37 m. afternoon
D	0 41	20			19 Mercury's greatest elongation
23	1 42	20			31 Saturn sets at 0 h. 40 min. morning
24	2 43	20			44 Jupiter rises at 11 h. 0 m. afternoon
25	3 44	20			55
26	4 45	21			6 Seven Stars south at 11 h. 21 m. afternoon
27	5 45	21			17 Day breaks at 5 h. 50. min.
28	6 46	21			28 Sun rises at 7 h. 54 min.
D	7 47	21			38 Clock is after the Sun 11 m. 7 sec.
30	8 48	21			48

Lunations						M	Jupiter	Venus
						D	rises	sets
Full moon the 2d day, at 5 afternoon						1	10a 3a	7 a 3
Last quarter the 9th day, at 6 afternoon						7	10 7	7 16
New moon the 16th day, at 5 afternoon						13	9 42	7 30
First quarter the 24th day, at 1 afternoon						19	9 14	7 43
						25	8 47	7 57
M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and		
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather		
1	T		6m 26	25 8 39	18 n 38	This month ap-		
2	W		D rises	8 11 30	20	pears to be un-		
3	T		5 a 6	21 37 20	24	ered in with		
4	F		6 9	4 59 19	37	☐ ♂ ♀		
5	S		7 16	18 30 17	43	* ♀ ♀		
6	D	2 S. in Adv.	8 29	2 23 14	46	Nicholas		
7	M		9 44	16 20 10	58	☐ ☉ ♄, ☐ ♀ ♀		
8	T	Conception	11 1	0 23 6	33	heavy showers,		
9	W		morn	14 30 1	45	high winds,		
10	T		0 18	28 40 3	10	and a great		
11	F		1 37	12 51 7	55	variety of cold		
12	S		2 53	27 0 12	15	winterly weather		
13	D	3 S. in Adv.	4 11	11 6 15	52	Lucy.		
14	M		5 24	25 6 18	32	Dark & cloudy.		
15	T		6 33	8 58 20	3	Snow, sleet or		
16	W	O. Sap. C. T. c.	D sets	22 37 20	23	Ember week.		
17	T	Oxf. T. ends.	5 a 0	6 3 19	32	☐ ♄ ♀		
18	F		6 12	19 11 17	38	cold rain.		
19	S		7 20	2 2 14	54	Dark foggy and		
20	D	4 S. in Adv.	8 26	14 35 11	33	unsettled.		
21	M	St. Thomas	9 32	26 52 7	46	Short. d. ☐ ♄ ♂		
22	T		10 36	8 56 3	44	☐ ☉ ♄, ☐ ☉ ♂		
23	W		11 39	20 51 0	23	Snow and frosty.		
24	T		morn	2 42 4	28			
25	F	Christmas D.	0 43	14 33 8	23			
26	S	St. Stephen	1 45	26 30 12	1	☐ ♄ ♀, ☐ ♂ ♀		
27	D	St. John	2 51	8 38 15	13	S. after Christmas		
28	M	Holy Innocen.	3 55	21 2 17	48	More mild to-		
29	T		5 0	3 45 19	35	wards the end.		
30	W		5 56	10 49 20	22			
31	T	Silvester	6 49	0 16 20	2			

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	16 ^h 42 ^m	7 8 18	0 ^m 59 ^s	12 n 0	26 ^h 42 ^m	14 n 56	24 ^h 0 ^m	23 8 44
7	16 52	7 14	1 13 11	57	28 26	14 31	0 55	22 17
13	17 6	7 8	1 20 11	55	29 52	14 12	7 44	20 34
19	17 23	7 0	1 20 11	57	0 ^m 57 ^s	14 0	14 26	18 20
25	17 42	6 51	1 13 12	0	1 40	13 57	21 2	16 4

M	Sun's		Observations	
D	Longit.	Declin.		
1	9 ^h 49 ^m	21 57	Pole Star south at 8 h. 33 min. afternoon	
2	10 50	22 6	Saturn sets at 0 h. 2 min. morning	
3	11 51	22 14	Jupiter rises at 10 h. 24 min. afternoon	
4	12 52	22 22	Clock is after the Sun 9 m. 10 seconds	
5	13 53	22 29		
D	14 54	22 36	Seven Stars south at 10 h. 38 m. afternoon	
7	15 55	22 43	Day breaks at 5 hours 57 minutes	
8	16 56	22 49	Sun rises at 8 h. 3 min.	
9	17 57	22 55	Day is decreased 8 hours 42 minutes	
10	18 58	23 0		
11	19 59	23 5	Saturn sets at 11 h. 25 min. afternoon	
12	21 0	23 10	Jupiter rises at 9 h. 46 m. afternoon	
D	22 1	23 13	Sun sets at 3 h. 54 min.	
14	23 2	23 17	Twilight ends at 6 hours 1 minute	
15	24 3	23 20		
16	25 4	23 22	Pole Star south at 7 h. 27 m. afternoon	
17	26 6	23 24	Day is decreased 8 hours 48 minutes	
18	27 7	23 26	Day is 7 h. 44 min. long	
19	28 8	23 27	Clock is after the Sun 2 m. 9 seconds	
D	29 9	23 28		
21	0 ^h 10 ^m	23 28	Sun enters 1 ^h 7 h. 59 min. morning	
22	1 11	23 28	Saturn sets at 10 h. 40 min. afternoon	
23	2 13	23 27	Jupiter rises at 8 h. 56 m. afternoon	
24	3 14	23 26	Day breaks at 6 h. 1 min.	
25	4 15	23 24		
26	5 16	23 22	Seven Stars south at 9 h. 10 m. afternoon	
D	6 17	23 19	Sun rises at 8 h 7 m.	
28	7 18	23 16	Sun sets at 3 h: 54 minutes	
29	8 20	23 12	Twilight ends at 6 h. 0 m in.	
30	9 21	23 8		
31	10 22	23 4		

32 Mercury's Longitude and Declination, for 1789.

Days	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	28 1 36	24 8 3	19 38	16 8 43	24 4 0	39
4	3 11	24 20	25 1	14 44	22 34 0	21
7	7 50	24 26	0 24	12 33	20 8 0	34
10	12 33	24 19	5 42	10 14	17 15 1	55
13	17 20	24 0	10 47	7 49	14 30 3	26
16	22 12	23 27	15 24	5 28	12 21 4	53
19	27 8	22 42	19 20	3 17	11 2 6	5
22	2 10	21 42	22 17	1 26	10 38 6	56
25	7 18	20 29	23 58	0 7	11 5 7	25
28	12 31	19 1	24 16	0 34	12 17 7	31
1	14 54	7 12	26 13	8 20	29 36 25	35
4	17 29	6 36	1 56	10 42	4 39 25	29
7	20 30	5 44	7 55	13 7	9 17 25	7
10	23 54	4 38	14 8	15 30	13 29 25	30
13	27 40	3 18	20 33	17 49	17 15 23	43
16	1 44	1 46	27 6	19 57	20 34 22	49
19	6 5 0	3 3	3 40	21 49	23 23 21	50
22	10 43	1 51	10 7	23 20	25 40 20	49
25	15 37	3 53	16 21	24 28	27 22 19	49
28	20 47	6 3	22 17	25 12	28 26 18	52
1	28 48	18 2	20 40	19 44	12 42 8	15
4	28 30	17 22	23 20	20 7	18 14 5	54
7	27 30	16 53	20 47	20 15	23 35 3	33
10	25 58	16 37	1 4	20 3	28 46 1	13
13	24 3	16 36	6 1	19 28	3 48 1	5
16	22 2	16 47	11 30	18 29	8 40 3	20
19	20 15	17 11	17 17	17 6	13 23 5	31
22	18 59	17 43	23 13	15 24	17 57 7	37
25	18 28	18 21	29 11	13 26	22 23 9	39
28	18 49	18 59	5 4	11 16	26 39 11	34
1	0 47	13 22	18 45	18 51	22 15 16	51
4	4 44	15 3	15 12	16 54	26 35 18	15
7	8 29	16 35	11 17	14 45	1 1 19	34
10	11 59	17 58	8 8	12 55	5 31 20	47
13	15 11	19 9	6 33	11 48	10 5 21	53
16	17 59	20 7	6 39	11 31	14 41 22	50
19	20 16	20 49	8 13	11 56	19 19 23	37
22	21 49	21 11	10 53	12 51	23 59 24	13
25	22 25	21 8	14 21	14 6	28 40 24	38
28	21 48	20 34	18 5	15 25	3 26 24	51

A Compendious Chronology of memorable Things since the Creation to this present Year.

A.P.J.	before Christ.		Years since.
710	4004	The Creation of the World	5793
1766	2948	Noah born	4737
2366	2348	Noah's Flood began	4137
2481	2233	The Babylonian Monarchy established	4022
2718	1996	Abraham born	3785
2986	1728	Joseph sold into Egypt	3517
3143	1571	Moses born	3360
3223	1491	The Israelites Departure out of Egypt	3280
3530	1184	Troy taken and destroyed by the Greeks	2973
3710	1004	Solomon's Temple built and dedicated	2792
4126	588	Jerusalem and the Temple destroyed	2377
4176	538	Daniel delivered from the Den of Lions	2327
4198	516	The Temple of Jerusalem rebuilt	2305
4391	323	The Death of Alexander the Great	2112
4710	4	The true Year of Christ's Birth	1793
4714	0	The vulgar Year of Christ's Birth	1789

A.D.		
33	The Passion and Resurrection of Jesus Christ	1756
70	Jerusalem and the Temple destroyed by Titus	1719
100	St. John, the last of the Apostles, dies Dec. 20.	1689
313	Christianity triumphs under Constantine	1476
476	Augustulus, the last Roman Emperor, deposed	1313
606	The wicked Phocas makes Pope Boniface Head of the Church	1183
608	Mahomet broaches his Imposture at Mecca	1181
872	Italy and Rome plundered by the Saracens	917
1012	Swein King of Denmark conquers England	777
1066	William Duke of Normandy conquers England	723
1110	Arts and Sciences taught in Cambridge	679
1119	The first War between the French and English	570
1300	The Mariners Compass invented	489
1330	The Canaries discovered by an English Ship	459
1380	Gunpowder and the Use of Guns first found out	409
1453	Constantinople taken from the Christians	336

A.D.

Years
since.

1463	The <i>Persians</i> conquered by <i>Tamerlane</i>	326
1509	<i>Rome</i> plundered by the Duke of <i>Bourbon</i>	289
1517	<i>Martin Luther</i> first disputed against Popery	271
1536	<i>England</i> separated from the Church of <i>Rome</i>	253
1588	The <i>Spanish Armada</i> defeated by the <i>English</i>	199
1603	Q. <i>Eliz.</i> dies <i>March 24</i> , and K. <i>James I.</i> began	186
1604	Died of the Plague in <i>London</i> , in 2 Years, 68,596	185
1605	Gunpowder Treason, <i>Nov. 5</i> .	184
1613	The New-River Water brought to <i>London</i>	176
1618	The excellent Sir <i>Walter Raleigh</i> beheaded	171
1625	K. <i>James I.</i> died, King <i>Charles I.</i> began, <i>Mar. 27</i> .	164
1625	35,417 Persons died of the Plague in <i>London</i>	164
1641	The cruel <i>Irish</i> Massacre began, <i>October 23</i> .	148
1643	<i>Burleigh-House</i> stormed by <i>Cromwel</i> , <i>July 24</i> .	146
1649	K. <i>Charles I.</i> beheaded, <i>January 30</i> .	140
1658	<i>Oliver Cromwell</i> died.	131
1660	K. <i>Charles II.</i> restored, <i>May 29</i> .	129
1665	68,586 Persons died of the Plague in <i>London</i>	124
1666	<i>London</i> burnt, and a great Sea-Fight with the <i>Dutch</i>	123
1672	War declared against the <i>Dutch</i> , <i>March 17</i> .	117
1674	A great Snow for 11 Days together	115
1675	The Town of <i>Northampton</i> burnt, <i>Sept. 3</i> .	114
1680	A great and splendid Comet appeared	109
1684	The great Frost that held 13 Weeks	105
1685	K. <i>Charles II.</i> died, <i>Feb. 6</i> . and K. <i>James II.</i> began	104
1685	The Duke of <i>Monmouth</i> beheaded, <i>July 15</i> .	104
1688	Seven Bishops sent to the Tower, <i>June 8</i> .	101
1688	K. <i>James II.</i> abdicated, <i>December 12</i> .	101
1689	K. <i>William</i> and Q. <i>Mary</i> crowned, <i>April 11</i> .	100
1692	The <i>French</i> Fleet entirely defeated by the <i>English</i>	97
1698	<i>Whitehall</i> Palace destroyed by Fire.	91
1702	K. <i>William</i> died, <i>March 8</i> , and Q. <i>Anne</i> began	87
1702	Q. <i>Anne</i> proclaimed War against <i>France</i> , <i>May 4</i> .	87
1703	A great and terrible Wind, <i>Nov. 26</i> and <i>27</i> .	86
1704	<i>Gibraltar</i> taken by the <i>English</i>	85
1707	<i>England</i> and <i>Scotland</i> united, <i>May 1</i> .	82
1710	Riots and great Disturbances in <i>England</i> .	79
1714	Q. <i>Anne</i> died <i>August 1</i> . and K. <i>George I.</i> began	75

A.D.		Years since.
1715	A Rebellion in <i>Scotland</i> and <i>Lancashire</i> suppressed	74
1716	A great Frost in the Beginning of this Year	73
1718	The <i>Spanish</i> Fleet destroyed by Admiral <i>Byng</i> .	71
1719	A surprizing Meteor seen, <i>March</i> 19, at 8 at Night	70
1719	Mr. <i>Flamsteed</i> , a celebrated Astronomer died <i>Dec.</i> 31.	70
1727	The incomparable Sir <i>Isaac Newton</i> , died <i>Mar.</i> 20.	62
1727	K. <i>George</i> I. died, <i>June</i> 11, and K. <i>George</i> II. began	62
1736	The Prince and Princess of <i>Wales</i> married, <i>Ap.</i> 27.	53
1739	Letters of Marque published in <i>London</i> against the <i>Spaniards</i> , <i>July</i> 16.	50
1739	War declared by <i>Great Britain</i> against <i>Spain</i> .	50
1739	<i>Porto-Bello</i> taken and destroyed by Admiral <i>Vernon</i> .	50
1740	A very severe Frost from <i>Dec.</i> 25, to <i>Feb.</i> 27.	49
1742	A Comet appeared from <i>Feb.</i> 18, to <i>March</i> 14.	47
1743	A splendid Comet appeared from <i>December</i> 23, to <i>February</i> 18, in γ	46
1744	<i>March</i> 4, <i>France</i> declared War against <i>England</i> ; and <i>March</i> 31, <i>England</i> declared War against <i>France</i> .	45
1745	<i>Cape Breton</i> taken from the <i>French</i> , <i>June</i> 16.	44
1746	The <i>Scotch</i> Rebels defeated by the Duke of <i>Cum-</i> <i>berland</i> , at <i>Culloden</i> , near <i>Inverness</i> , <i>April</i> 16.	43
1748	A General Peace signed <i>October</i> 7.	41
1749	<i>Cape Breton</i> restored to the <i>French</i> .	40
1750	The <i>British</i> Fishery established.	39
1751	The Prince of <i>Wales</i> died <i>March</i> 20.	38
1752	The Date and Calendar altered.	37
1755	<i>Lisbon</i> destroyed by an Earthquake, <i>Nov.</i> 1.	34
1756	<i>England</i> declared War against <i>France</i> , <i>May</i> 18.	33
1756	The Island <i>Minorca</i> taken by the <i>French</i> , <i>June</i> 27.	33
1757	Count <i>Brown</i> defeated by the King of <i>Prussia</i> near <i>Prague</i> , <i>May</i> 6.	32
1757	The King of <i>Prussia</i> defeated by Count <i>Dawn</i> at <i>Collin</i> , <i>June</i> 18.	32
1758	The <i>French</i> defeat at <i>Crowell</i> by P. <i>Ferdinand</i> , <i>June</i> 23	31
1758	Lord <i>Howe</i> slain, <i>July</i> 6, and Gen. <i>Abercrombie</i> repulsed at <i>Ticonderoga</i> , <i>July</i> 8.	31
1758	<i>Cape Breton</i> taken by the <i>English</i> , <i>July</i> 26.	31

A.D.

Years
since.

1758	The <i>Russians</i> defeated at <i>Zorndorff</i> by the King of <i>Prussia</i> , Sept. 25.	31
1759	The Island of <i>Guadalupe</i> taken by Gen. <i>Barrington</i> and Commodore <i>Moore</i> , May 1.	30
1759	The <i>French</i> defeat. at <i>Minden</i> by P. <i>Ferdinand</i> , Aug. 1.	30
1759	The King of <i>Prussia</i> defeated at <i>Cunnersdorff</i> by the Count <i>de Soltikoff</i> , August 12.	30
1759	Gen. <i>Wolfe</i> slain, though victorious, Sept. 13, and <i>Quebec</i> taken Sept. 18, by Gen. <i>Townshend</i> .	30
1760	<i>Montreal</i> taken by Gen. <i>Amherst</i> , Sept. 8.	29
1760	K. <i>Geo. II.</i> died Oct. 25, and <i>Geo. III.</i> succeeded.	29
1761	<i>Pondicherry</i> taken by Col. <i>Coote</i> , Jan. 15.	28
1761	K. <i>George III.</i> married Q. <i>Charlotte</i> , Sept. 8.	28
1761	K. <i>George III.</i> crowned, Sept. 22.	28
1762	The Island of <i>Martinico</i> taken by Gen. <i>Monckton</i> and Adm. <i>Rodney</i> , Feb. 14.	27
1762	<i>George Prince of Wales</i> born, August 12.	27
1762	The <i>Havannah</i> taken by Lord <i>Albemarle</i> and Sir <i>George Pocock</i> , August 12.	27
1763	A general Peace in all <i>Europe</i> .	26
1763	Pr. <i>Frederick</i> , Bishop of <i>Osnaburgh</i> , born Aug. 16.	26
1765	Prince <i>William-Henry</i> born August 21.	24
1766	Princess <i>Charlotte-Augusta-Matilda</i> born Sept. 29.	23
1767	Prince <i>Edward</i> born Nov. 2.	22
1768	Princess <i>Augusta-Sophia</i> born Nov. 8.	21
1770	Princess <i>Elizabeth</i> born May 22.	19
1771	Prince <i>Ernest-Augustus</i> born June 5.	18
1772	<i>Swedes</i> resign their <i>Liberties</i> to the King.	17
1773	Prince <i>Augustus-Frederick</i> born Jan. 27.	16
1773	The <i>Light Gold</i> recoined.	16
1774	Prince <i>Adolphus Frederick</i> born Feb. 24.	15
1775	War commenced against the <i>North-Americans</i> .	14
1776	Princess <i>Mary</i> born April 25.	13
1776	The <i>Americans</i> declare themselves independent.	13
1777	Princess <i>Sophia</i> born Nov. 3.	12
1778	The <i>French</i> sign a Treaty with the <i>Americans</i> .	11
1778	War begun against the <i>French</i> .	11
1779	War commenced against the <i>Spaniards</i> .	10
1780	War against the <i>Dutch</i> begun.	9
1783	A general Peace.	6
1783	Princess <i>Amelia</i> born	6

Equation of Time to the nearest Minute.

Day	Jan sub	Feb sub	Mar sub	Apr sub	May add	June add	July sub	Aug sub	Sept add	Oct add	Nov add	Dec add	Day
	min	m	m	m	m	m	m	m	m	m	m	m	
1	4	14	12	4	3	3	3	6	0	11	10	10	1
2	4	14	12	3	3	2	4	6	1	11	16	10	2
3	5	14	12	3	3	2	4	6	1	11	16	9	3
4	5	14	12	3	4	2	4	6	1	11	16	9	4
5	6	14	12	2	4	2	4	6	2	12	16	9	5
6	6	15	12	2	4	2	4	5	2	12	16	8	6
7	7	15	11	2	4	1	5	5	2	12	16	8	7
8	7	15	11	2	4	1	5	5	3	13	16	7	8
9	8	15	11	1	4	1	5	5	3	13	16	7	9
10	8	15	10	1	4	1	5	5	3	13	16	6	10
11	8	15	10	1	4	1	5	5	4	13	16	6	11
12	9	15	10	1	4	0	5	5	4	14	15	5	12
13	9	15	9	0	4	0	5	4	4	14	15	5	13
14	10	15	9	0	4	0	5	4	5	14	15	4	14
15	10	15	9	add	4	sub	6	4	5	14	15	4	15
16	10	14	9	0	4	0	6	4	6	15	15	4	16
17	11	14	8	1	4	1	6	4	6	15	15	3	17
18	11	14	8	1	4	1	6	3	6	15	11	3	18
19	11	14	8	1	4	1	6	3	7	15	14	2	19
20	11	14	7	1	4	1	6	1	7	15	14	2	20
21	12	14	7	2	4	1	6	1	7	15	14	1	21
22	12	14	7	2	4	2	6	2	8	16	13	1	22
23	12	14	6	2	4	2	6	2	8	16	13	0	23
24	13	14	6	2	4	2	6	2	8	16	13	sub	24
25	13	13	6	2	3	2	6	2	9	16	12	1	25
26	13	13	6	3	3	2	6	1	9	16	12	1	26
27	13	13	5	3	3	3	6	1	9	16	12	2	27
28	13	13	5	3	3	3	6	1	10	16	11	2	28
29	14	13	5	3	3	3	6	0	10	16	11	3	29
30	14		4	3	3	3	6	0	10	16	11	3	30
31	14		4		3		6	add		16		4	31

If the equal or clock time be given, add or subtract the tabular numbers to or from it, as directed in the table; the sum or difference will be the apparent or solar time. But do the contrary to reduce the apparent to equal time.

The Eclipses of Jupiter's

January				February				March				April			
Immersion				Immersion				Emergence				Emergence			
1	1	12	15	1	23	50	26	2	7	30	36	1	47	11	
2	19	39	47	3	18	18	52	4	1	59	42	3	4	10	27
4	14	7	28	5	12	47	21	5	20	28	48	4	22	45	43
6	8	35	8	7	7	15	52	7	14	57	56	6	17	14	57
8	3	2	53	9	1	44	27	9	9	27	4	8	11	44	10
9	21	30	37	10	20	13	3	11	3	56	15	10	6	13	23
11	15	58	27	12	14	41	44	12	22	25	27	12	0	42	35
13	10	26	21	14	9	10	25	14	16	54	40	13	19	11	48
Emergence				16	3	39	12	16	11	23	53	15	13	40	59
15	7	8	54	17	22	8	2	18	5	53	6	17	8	10	8
17	1	36	52	19	16	36	50	20	0	22	20	19	2	39	16
18	20	4	52	21	11	5	42	21	18	51	35	20	21	8	23
20	14	32	55	23	5	34	36	23	13	20	50	22	15	37	29
22	9	0	58	25	0	3	34	25	7	59	6	24	10	6	32
24	3	29	4	26	13	32	33	27	2	19	23	26	4	35	36
25	21	57	14	28	13	1	34	28	20	48	39	27	23	4	36
27	16	25	28					30	15	17	54	29	17	33	34
29	10	53	44												
31	5	22	5												

May				June				July				August			
Emergence				Emergence											
1	12	2	34	2	8	38	44	The Eclipses of Jupiter's Satellites will not be visible this Month, Jupiter being too near the Sun.				The Eclipses of the Satellites of Jupiter will not be visible this Month, Jupiter being too near the Sun.			
3	6	31	29	4	3	7	10								
5	1	0	23	5	21	35	34								
6	19	29	16	7	16	3	57								
8	13	58	5	9	10	32	19								
10	8	26	54	11	5	0	39								
12	2	55	41	12	23	29	0								
13	21	24	25	14	17	57	20								
15	15	53	9	16	12	25	39								
17	10	21	50	18	6	53	58								
19	4	50	29	20	1	22	16								
20	23	19	7	21	19	50	34								
22	17	47	42	23	14	18	52								
24	12	16	16	25	8	47	10								
26	6	44	49	27	3	15	29								
28	1	13	20	28	21	43	48								
29	19	41	49	30	16	12	9								
		10	18												

First Satellite.

September	October	November	December
Immersion	Immersion	Immersion	Immersion
2 7 10 39	2 9 25 27	1 11 34 6	1 13 30 35
4 1 39 46	4 3 54 30	3 6 2 31	3 7 58 16
5 20 8 53	5 22 23 26	5 0 30 52	5 2 25 54
7 14 38 1	7 16 52 25	6 18 59 10	6 20 53 29
9 9 7 10	9 11 21 18	8 13 27 25	8 15 21 3
11 3 36 18	11 5 50 12	10 7 55 37	10 9 48 37
12 22 5 25	13 0 19 3	12 2 23 47	12 4 16 8
14 16 34 34	14 18 47 52	13 20 51 53	13 22 43 41
16 11 3 41	16 13 16 40	15 15 19 57	15 17 11 10
18 5 32 49	18 7 45 26	17 9 47 58	17 11 38 41
20 0 1 55	20 2 14 9	19 4 15 57	19 6 6 9
21 18 31 3	21 20 42 50	20 22 43 52	21 0 33 39
23 13 0 9	23 15 11 27	22 17 11 44	22 19 1 8
25 7 29 14	25 9 40 6	24 11 39 36	24 13 28 37
27 1 58 19	27 4 8 39	26 6 7 25	26 7 56 7
28 20 27 24	28 22 37 11	28 0 35 10	28 2 23 36
30 14 56 28	30 17 5 40	29 19 2 54	29 20 51 8
			31 15 18 40

To illustrate the Use of the preceding Table by an Example.

Suppose on the 28th Day of December this Year, the Time of the Immersion of Jupiter's first Satellite be observed by a Telescope in an unknown Meridian, to happen at 4h. 11 min. 56 sec. at Night; I find by the Table, that the Time of this Immersion will happen at the British Observatory at 2 h. 23 min. 36 sec. the same Day: The Difference of the Times is 1 h. 48 min. 20 sec. which being converted into Degrees and Minutes of the Equator, at the Rate of 15 Degrees per Hour, will make 27 deg. 5 min. the Longitude of the Place of Observation to the East; because the Time is more than that at the British Observatory.

Operation.	Immersion observed	—	4 ^h 11 ^m 56 ^s
	Immersion at Greenwich	—	2. 23. 36
	The Difference of Time	—	1. 48. 20.
	Answering to	—	27° 5' 0"

*Me vero primum dulces ante omnia Musæ,
Quarum sacra Fero ingenti perculess amore,
Accipiant; cælique vias et Sidera monstrant;
Defectus Solis variosque Lunæ labores.*

This Year there will be four Eclipses; two of the Sun, and two of the Moon; one only of which will be visible to the Inhabitants of this Isle. They will happen in Manner following:

The first is an invisible Eclipse of the Moon, and will happen on Saturday, the 9th Day of May, the Particulars of this Lunar Defect are as follows:

Beginning	8 h.	38 m.	Morning.
Middle	9	31	
End	10	24	

Digits eclipsed—2 deg. 54 min. on the Moon's northern Limb.

This Eclipse, although invisible to us, may be seen in all the western Parts of both North and South America. The Inhabitants also of the Philippine Isles, New Holland, Japan, &c. may view the Whole of this Defect.

The Second will be an invisible Eclipse of the Sun, and will happen on Sunday, May the 24th; at 20 Minutes and a half past Ten at Night. Although this Defect will be totally invisible to us, the Sun will be centrally eclipsed on the Meridian at 10 Hours 18 Minutes in Long. $154^{\circ} 29'$ West, and South Lat. $11^{\circ} 15'$.

The third will be an Eclipse of the Moon, and visible to the Inhabitants of Great Britain; take the Type and Calculation as follows,



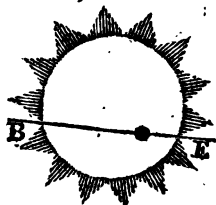
Beginning Nov. 2. at 11^h. 28 $\frac{1}{4}$ ^m Night.
Middle Nov. 3. at 0 32 $\frac{1}{4}$ Morn.
End Nov. 3. at 1 36 $\frac{1}{4}$ Morn.
Digits Eclipsed 3 deg. 40 min. on the Moon's Southern Limb.

This Defect will not only be visible to the Europeans and the Inhabitants of Africa, but likewise to the Western Parts of Asia, and the Eastern ones of America; but the Moon will set before the Eclipse is over to the Inhabitants of China, Chinese Tartary, and those Parts.

The

The Fourth and last in the Course of this Year, will be an Eclipse of the Sun, which will happen on Tuesday the 17th of November, at 24 Minutes past 3 in the Morning, and consequently, invisible to us. It will however be centrally eclipsed on the Meridian, in Long. 129 deg. 31 min. and 14 deg. 45 min. North Lat. at 3 hours 22 min. Morning. It will therefore be visible in China, Japan, and the Eastern Part of Tartary in Asia.

We next in the Course of this Performance, take this Opportunity to acquaint our Readers of a Transit of Mercury over the Sun's Disc, which, according to the best Astronomical Tables, is this Year expected to happen as follows,



Beginning Nov. 5,	1 h. 10 m. aft.
Ecliptic conjunction	3 30
Middle of the Transit	3 37
Sun sets	4 40
End or Egress	6 4
See a Type of the Transit in the Margin.	

We must further observe, that at the latter End of the Year 1788, or the Beginning of this Year, a Comet is expected to make its Appearance to the Inhabitants of this Terrestrial Globe; but as the Laws and destined Times of these Wanderers through immense Space are not yet determined, for want of better Observations; and more in Number than we have received from the Ancients; we must, after collecting all the Data we can, in order to acquire a better Knowledge of their Motions, leave Posterity to finish what this enlightened Age has already so far advanced.

Whoever has noticed this History of the various Chances and Changes in this transitory World, will scarce find any great Mutation in Empires or States, to which the Historian has not prefixed either a Comet or a total Eclipse, as a Warning from Heaven, of some great Calamity that was upon the Point of visiting the Children of Mortality. Hence the blazing Star, with its fiery Tail, was not looked upon as a solid, durable Substance, moving in stated Times about the Sun, but as Beacons of the Fire of consuming Vengeance, lighted up in the Heavens, as Tokens of the divine Wrath, or as the Angels in the Apocalypse, pouring down their Vials of Destruction

tion, or sounding an Alarm upon the Trumpet of Desolation, to remind them of the Woes that were yet to come.—This being done, they, disappearing, left Mankind convinced within themselves that, having performed their Task, they had retired according to the Will of him who sent them, and, like unwelcome Guests, Men were glad when they had got rid of them.

Later Astronomers have however fully convinced the World, that they are Bodies moving in Orbits vastly elliptical; that the Sun is in one of the Foci, and near to its Orbit, the other at an immense Distance beyond the Orbit of Saturn; according to which Hypothesis, they must sometimes be much hotter than Mercury, and at others far colder than the dreary Planet before mentioned. Martin tells us, from the best Authorities he could procure, that although the Number of Comets which perform their mystic Dance around the solar System, is perhaps not yet ascertained, yet the Number that has been observed, and fallen under the Notice of Astronomers, is about 39, though it is probable, and not impossible, that there may be many more belonging to this System. That the stated Periods of Time, in which they move about the Sun, are various, and many of them at present unknown to us. That which appeared in 1680, hath its Period in 575 Years, that in 1661 hath its Period in 129 Years, and that of 1682, hath its Period the shortest of all, viz. in $75\frac{1}{2}$ Years. As to the End for which the stupendous Wanderers have their Courses determined in this surprising Manner, inasmuch that the Comet in 1680 was computed to be not a sixth Part of the Sun's Diameter distant from its Surface, and therefore its Heat 2900 Times hotter than red hot Iron; and again after taking his Course from the Sun to the distance of more than 11,000,000,000 Miles, the Light and Heat of that same Comet was then about 17,000 Times less than with us. However different the Sentiments of Men have been upon this Subject, the best is but Conjecture, and we can only say, that the Secrets of the Lord are unsearchable, and his Works are past finding out.

As to the Comet in Question, I shall only add from the best Authority, that the Comet of 1531, 1697, and 1682, having returned in the Year 1759, according to Dr. Halley's Prediction, there is no Reason to doubt but that all the other Comets will return after their proper Periods. Accordingly, Astronomers have generally acquiesced in the Conjecture that the Comets of 1532 and 1661 were one and the same, and to expect

expect ~~its Return in 1789~~, or the latter End of 1788; however, not later than the 27th of April 1789.

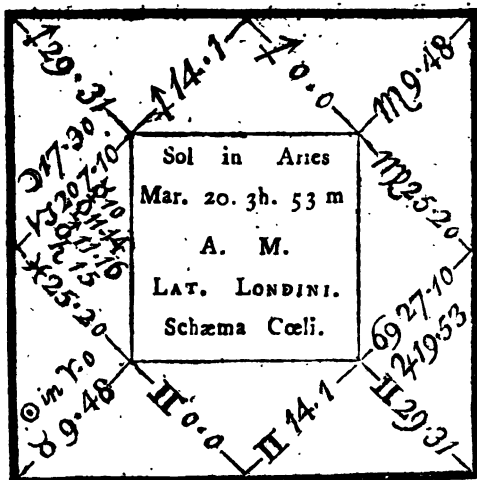
One Question (it occurs to me) will naturally occur likewise to several of my curious Readers, unacquainted with the Coelestial Science, which is this; Is there any Danger to be expected from the Approach of a Comet? I answer Yes, there may be; or it may be otherwise. The Truth is, that these are great and rare Events, (as one wisely observes) and although they are possible in Nature, yet some Things make it a very great Chance if they happen at all with regard to any definite Time. For the Plains of all the Comets Orbits are raised above those of the Planets; so that there is but one particular Place, in the Orbit of a Comet, where its Tail can pass over the Orbits of the Planets; and it is so many Chances to one, that a Planet happens to be in that Part of its Orbit, at that particular Time, that we have no Reason to fear any such Catastrophe. And (he further adds) they who have talked about such terrible Things, may rather be said to *dream*, than to have demonstrated any such future Events. Having but one Page more, for those who look upon the Aspects of the Planets as Forerunners of future Events, we here conclude our Observations upon this Subject, with Part of the 9th Ode of Horace; *Vides ut alta*, &c. as translated by Mr. Congreve.

'Tis Heav'n's Concern, and let it be
The Care of Heaven still for me:
Those Winds which rend the Oaks, and plough the Seas
Great Jove can, if he please,
With one commanding Nod appease.

Seek not to know To-morrow's Doom;
That is not ours which is to come.
The present Moment's all our Store;
The next should Heav'n allow,
Then this will be no more:
So all our Life is but one Instant now.

ASTROLOGIC Observations for the Year 1789.

On the 20th of March, at 3^h 53^m A. M. the coelestial Charioteer enters the first Scruple of Aries, from whence our Spring Quarter commences; and a Figure of the Heavens, according to the Rules of ancient Astrologers at that Juncture, you have as follows.



Here is the Scheme of the Heavens at the Sun's Ingress into the celestial Aries, calculated to the greatest Exactness, and lies open to all who have either a Value for, or Judgment in that ancient Science of Astrology, which formerly sat at the Head of all others, and to which the others were only looked upon as subservient; but at this Day is sunk so low, as to be a Laughing-stock to Fools, and detested by the Incredulous. Such is the Fate of all human Things. It must however be allowed, that it takes a great deal of Learning to make a good Astrologer; and the old Verse of course may be true;

Heav'n is a Book; the Stars are Letters fair;
God is the Writer, Men the Readers are.

This in my Opinion is not the Year when Peace shall wave her Olive Branch over the whole Globe; I rather think there will be Discords, Bloodshed, and Revolutions in divers Places; but there is a Hand unseen which brings Good out of Evil; and private Calamities shall at last produce a public Good. The Almighty works by Ways inscrutable to Men, yet I sincerely believe there is working in this our Day, under the Hand of Providence, a grand Scheme which will close in fulfilling all the Prophecies from Adam to Malachi.

Of

Whether the MOON be HABITABLE.

(CONTINUED from LAST YEAR.)

But what kind of Creatures these Lunar Inhabitants are, is not agreed upon, though Kepler be something positive, *Concludendum videtur* (says he, in *Not. ad Appendic. Selenograph.*) in *Luna Creaturas esse viventes, Rationis, ad Ordinata facienda, Capaces.* The like is affirmed by him as to the other Planets; nay, the Sun itself, touching which last, in the Epilogue to his Fifth Book, *De Mundi Harmonia*, he breaks out into this Expression, *Vel Sensus ipsi exclamant, ignea hic habitare Corpora, Mentium Simplicium Capacia, vereque solem esse πύρος νοερός, si non Regem, at Saltam Regiam.*

This cannot perhaps seem more strange to some, than the following Assertion to others, which maintains the Moon to be the Paradise wherein our first Parents were created, and from whence, for their Transgression, they were thrust down to this Earth of ours; and yet this from Reason and the Authority of Fathers and Schoolmen, is endeavoured to be proved by Hieronymus Vitalis *Lexic. Mathemat. in voce Paradisus*; where he says, *fateor id novum, Singulare et hactenus inauditum*; at non per hoc temerarium, at que intolerabile dixeris; for, as he urges, *modò partâ tantâ rerum Notitiâ, Luna facie Telescopio penitissimè observatâ, veterum dictis Expensis, Locis (super hanc Terram) investigatis, Paradisum in Lunæ superficie collocare, Ratio ipsa compellet.* To whose large Discourse upon that Subject we refer the Reader.

M E R C U R Y.

The next Planet in Order is Mercury; of whose Place, Figure, Nature, and Substance, something, according to our Method, is briefly to be added.

It is carried in an Epicycle about the Sun, as the Center of its Motion and Orb: Now running above, now beneath the Sun; sometimes higher than Venus, sometimes lower; for when the two Planets (Venus and Mercury) are in their Apogœa, and above the Sun, then Mercury is beneath Venus; when in their Perigœa, and beneath the Sun, then Mercury is above Venus: So when Venus is in her Apogœum, and Mercury in his Perigœum, then is he beneath Venus; when Venus is in her Pe-

Perigœum, and Mercury in his Apogœum, then is he above Venus, as may appear by the Egyptian and Tychonick Systems.

Its Figure is orbicular or round, not mathematically, but physically such, rising here and there with extuberating Hills and Mountains, in the same Manner as this earthly Globe of ours; being, like that, an opacous Body, and receiving its Illumination from the Sun; whence at several Times it is seen under several Phases or Appearances; for in its greatest Digression from the Sun, (which is never above 28°) it appears dichotomous; but when he is retrograde, and approaching to an Opposition with the Sun, he appears in a Figure like that of the New Moon, when distant about 60° from the Sun; though this Phase be very rarely discerned by reason of his small Digression from the Sun, and the quick Vibration of his Rays, the Vivacity of his Light exceeding that of Venus and Jupiter, and thence impeding the Sight from rightly beholding that Phenomenon, unless fortified by an excellent Telescope, as likewise in regard of the great Refractions made by Vapours near the Horizon, especially in Climates more obliquely posited, as is noted by Regiomontanus and Copernicus, who for that Reason could never be so happy as duly to observe these mercurial Phases. Ricciolus reports that he, together with Franciscus Maria Grimaldi, in the Year 1643, the Fifth of March, when Mercury was in the upper Part of his Epicycle, and vespertine at 15° of Elongation from the Sun, beheld him in a gibbous Figure, like the Moon when more than half full; the like in the Year 1656, December 16. In the Year 1643, August 25, the same Persons beheld him being matutine, and 19° distant from the Sun, in a Figure like that of a Sickle or Scythe; so likewise in the Year 1644, August the 6th, being distant from the Sun 20° . But in the Year 1647, April 30, being vespertine, and distant from the Sun 20° , they beheld him in a like Scythe-like Figure, but more approaching toward a Dichotomy. In the same Figure likewise they beheld him in the Year 1650, when vespertine, and distant 18° from the Sun. There are observed in him likewise several Spots successively following one another, some Light, some dusky; which light Spots are by Kircherus conceived to be the said terrestrial and mountainous Parts of the mercurial Globe illuminated by the Sun, the dusky ones to be the liquid or watery Parts thereof, which, by their successive Motion, likewise evince that he hath a vertiginous Rotation about its own Axis, determined

determined within the Space of six Hours, or thereabouts, as Rheita affirms.

As to its Distance from the Earth, the same is by Tycho computed to be in its greatest Distance 1660 Semidiameters of the Earth, in its mean Distance 1150, in its least 630; but according to the Calculation of Ricciolus, in its greatest Distance 10868 Semidiameters, in its mean 8057, in its least 5246.

Its apparent Diameter in its mean Distance is by Tycho computed to be $2' 10''$, by Ricciolus in its greatest Distance to be only $9''$, in its least Distance $25''$.

Its true Magnitude, according to Ricciolus (supposing its mean Distance to be as before expressed, and its Diameter to contain $\frac{1}{4}$ Part of the Earth's Diameter) is concluded to be less than the Earth's Body by $\frac{1}{338}$ Part. Which being reduced to the Measures of Kepler, its Diameter may be reckoned to contain 377 Italian Miles, the Solidity of its Body 21253933 cubical Italian Miles, or thereabout.

V E N U S.

The most illustrious of all the lesser Planets, hath been observed by the Curious from all Antiquity: the chief Remarks made by the Ancients are these: First, they observed her sometime to precede the Sun, rising in the Morning before him, sometime to follow the Sun, setting in the Evening after him, now to be in Conjunction with the Sun, that is in the same right Line drawn from the Observer's Eye, to the Center of the Sun, at other Times receding from him, to the Distance of 48 Degrees; and this was the First and most obvious Phenomenon.

They observed her likewise to differ in Magnitude, appearing sometimes greater, sometimes less, sometimes of a mean or middle Size, whence they concluded her to approach sometimes nearer to the Earth, and to be in Perigæo, at other Times to recede further from it, and to be in Apogæo; and this was the Second Phenomenon; but not commonly observed or obvious to all.

As to her rising and setting, they observed that she was never so remote from the Sun as that she ever set cosmically, or rose acronychally; that is, that she (the Sun rising in the Eastern Horizon) never set at the same Time in the West, or (the Sun setting in the West) never rose at the same Time in the East; for Venus cannot be opposed diametrically to the Sun, in regard
she

she never digresses from him above 48° , or thereabout: whence Venus rising in the Morning heliacally, that is, emerging out of the Sun's Beams, under which she lay hid, digresses more and more from him, and (he rising) appears higher and higher above the Horizon, until she comes to the Terms of her greatest Digression aforesaid, thence reapproaching the Sun, is hidden in the Morning heliacally, that is, is obscured under the Sun's Beams, until such Time as emerging heliacally in the Evening, she rises (the Sun setting) higher and higher above the Horizon, until she comes to the aforesaid Terms of her greatest Elongation; which past, she again approaches toward the Sun until such Time as in the Evening she sets heliacally. And this is the third Phenomenon, observable by all, but noted only by the Curious.

Besides these Observations of the Ancients, modern Astronomers, by the help of the Telescope, have noted several other signal Phenomena, as that she is liable to the same Variety of Changes as the Moon, sometimes almost full, at other Times gibbous, and now and then horned, as well when she is vespertine as matutine, manifested by the various Observations of Galilæo, Scheinerus, Fontana, Hortensius, Keplerus, Rheita, Gassendus, and Hevelius. She is sometimes likewise seen by Day, at which Time, according to Galilæus and Hevelius, her true Figure is best to be discerned, in regard she is despoiled of those adventitious Rays with which in the Night Time she is invested. Ricciolus and Grimaldus, in the Year 1649, on the first of April beheld her of a gibbous Figure; and on the 20th of the same Month bisected or dichotomised; and on the First of May, and First of September the same Year, horned, and so continued until the fourth Day, two Hours after Noon, and so to the eighth Day of the same Month, from the Sun's rising till Noon. On the 18th she was exactly bisected or dichotomised; on the 26th growing toward a gibbous Figure. But the rarest and most signal Phenomenon of Venus (says Ricciolus) is when she hath greatest Latitude, near her lowest Conjunction with the Sun; for being then seen by a good Telescope, she appears horned, as big as the New Moon to the bare Eye.

ἈΤΛΑΣ ΟΥΡΑΝΙΟΣ,
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The FORTIETH IMPRESSION.

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Chronological Notes for the Year 1789.

Golden Number	-	-	4	Septuagesima Sunday	Feb. 8
Cycle of the Sun	-	-	6	Shrove Sunday	22
The Epact	-	-	3	Easter Day	April 12
Dominical Letter	-		D	Whit Sunday	May 31
Number of Direction	-	22		Trinity Sunday	June 7
Roman Indiction	-	-	7	Advent Sunday	Nov. 29

Astronomical CHARACTERS explained.

♈ Aries	♋ Cancer	♏ Libra	♑ Capricorn
♉ Taurus	♌ Leo	♐ Scorpio	♒ Aquarius
♊ Gemini	♍ Virgo	♐ Sagittary	♓ Pisces
♄ Saturn	☉ Sol (the Sun)	☾ Luna (the Moon)	☿ Tellus,
♃ Jupiter	♀ Venus	♊ Moon's N. Node	Terra (or
♂ Mars	☿ Mercury	♋ her S. Node	the Earth)
♌ Conjunction when Planets are in the same Sign, Deg. Min. &c.			
♎ Sextile when 2 Signs dist.		♏ Trine when 4 Signs dist.	
♐ Quartile when 3 Signs dist.		♑ Opposition when 6 Signs dist	

Of the Four Quarters of the YEAR 1789.

		d	h	m
T HE Spring Quarter begins	-	March 20	3	53 morn.
The Summer Quarter begins	-	June 21	1	55 morn.
The Autumnal Quarter begins	-	September 22	3	28 aftern.
The Winter Quarter begins	-	December 21	7	59 morn.

THE beautiful Planet VENUS will be a Morning Star 'till May the 20th; and after that Time she will be an Evening Star to the Year's End.

JUPITER will be a Morning Star 'till the 14th Day of January, then an Evening Star till the 2d of August, at which Time he becomes a Morning Star, and so continues to the Year's End.

The NAMES of the Learned JUDGES of the LAW.

I. The Right Hon. Lord Thurlow, Lord High Chancellor.

Right Honourable Sir Richard Pepper Arden, Knt. Master of the Rolls.

II. In the } Right Hon. Lord Kenyon, L. C. J. Sir W. H. Ashurst, Knt.
K. Bench. } Francis Buller, Esq; Sir Nath. Grose, Knt.III. In the } R. H. Alex. Lord Loughborough, L. C. J. Sir Henry Gould, Knt.
C. Pleas. } John Heath, Esq; Sir John Wilson, Knt.IV. In the } Sir James Eyre, Knt. L. C. B. Sir Beaumont Hotham, Knt.
Exchequer } Sir Richard Perryn, Knt. Sir Alex. Thompson, Knt.

Sir Alex. M'Donald, Knt. Attor. General; Sir John Scott, Knt. Solic. Gen.

A TABLE of TERMS and Returns for the Year 1789.

Hilary Term begins Jan. 23, ends Feb. 12.

Returns or Effoign-days.

	Exc.	Ret.	Ap.	W. D.
In eight Days of St. Hilary, - - Jan. 20	21	22	23	Friday
In fifteen Days of St. Hilary - - - 27	28	29	30	Friday
On the Mor. of the Purif. of the Bl. V. M. Feb. 3	4	5	6	Friday
In eight Days of the Purif. of the Bl. V. M. 9	10	11	12	Thurs.

Easter Term begins April 29, ends May 25.

In fifteen Days of Easter - - - April 26	27	28	29	Wedn.
From Easter Day in three Weeks - May 3	4	5	6	Wedn.
From Easter Day in one Month - - - 10	11	12	13	Wedn.
From Easter Day in five Weeks - - - 17	18	19	20	Wedn.
On the Mor. of the Ascension of the Lord - 22	23	24	25	Monday

Trinity Term begins June 12, ends July 1.

On the Morrow of the Holy Trinity, - Jun: 8	9	10	12	Friday.
In eight Days of the Holy Trinity, - - - 14	15	16	17	Weds.
In fifteen Days of the Holy Trinity, - - - 21	22	23	24	Wedn.
From the Day of the Holy Trin in 3 Weeks. 28	29	30	31	Wedn.

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the Morrow of All Souls - - - Nov. 3	4	5	6	Friday.
On the Morrow of St. Martin - - - - 12	13	14	16	Mond.
In eight Days of St. Martin - - - - 18	19	20	21	Saturd.
In fifteen Days of St. Martin - - - - 25	26	27	28	Saturd.

N. B. No Sittings in Westminster-Hall on the Second of February, Ascension-day, and Midsummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but four Days.

Note, The first and last Days of every Term, are the first and last Days of Appellate.

BIRTH-DAYS of the ROYAL FAMILY.

KING GEORGE III. June 4, 1738	Prince Aug. Fred. Jan. 27, 1773
Prince of Wales, Aug. 12, 1762	Prince Adolph. Fred. Feb. 24, 1774
Prince Frederick, Aug. 16, 1763	Princess Mary, April 25, - 1776
Prince Wm. Henry, Aug. 21, 1765	Princess Sophia, Nov. 3, - 1777
Prs. Cha. Aug. Mat. Sept. 29, 1766	Princess Amelia, Aug. 7, - 1783
Prince Edward, Nov. 2, - 1767	Queen Charlotte, May 19, 1744
Prs. Augusta Sophia, Nov. 8, 1768	Prs. Augusta of Brun. Aug. 11, 1737
Prs. Elizabeth, May 22, - 1770	Duke of Gloucester, Nov. 25, 1743
Prince Ernest Augustus, June 5, 1771	Duke of Cumberland, Nov. 7, 1745

SOVEREIGNS OF EUROPE, their Accession, &c.

Kingdoms, &c.	To whom subject.	When born.	Began to reign.
England, &c.	George III.	June 4, 1738	Oct. 25, 1760
France	Lewis XVI.	Aug. 23, 1754	May 10, 1774
Russia	Catharine II.	May 2, 1729	July 9, 1762
Spain	Charles III.	Jan. 20, 1716	Aug. 10, 1759
Portugal	Mary	Dec. 7, 1734	Feb. 24, 1777
Prussia	Frederic IV.	Sept. 25, 1744	Aug. 17, 1786
Denmark & Norway	Christian VII.	Jan. 29, 1749	Jan. 14, 1766
Sweden	Gustavus III.	Jan. 24, 1746	Feb. 13, 1771
Germany	Joseph	Mar. 13, 1741	Aug. 18, 1765
Poland	Stanislaus III.	Jan. 17, 1732	Nov. 25, 1764
Holland	William V.	March 8, 1748	Oct. 11, 1751
Papedom	Pius VI.	Dec. 27, 1717	Feb. 18, 1775
Sardinia	Victor	June 26, 1726	Mar. 20, 1773
Ottoman Empire	Achmet IV.	Nov. 5, 1719	Jan. 21, 1774

The FULL WEIGHT of the Coins, with the LEAST WEIGHT allowed to pass of the Gold Coin.

GOLD.		Wt. allowed.	Full Wt.	SILVER.		Full Wt.
		dwt. gr.	dwt. gr.			dwt. gr.
Guinea, - -	5	8	5 9 ¹⁹ / ₁₆	A Crown, - -	-	19 8 ¹⁴ / ₁₆
Half Guinea, -	2	16	2 16 ⁵ / ₁₆	Half Crown, -	-	9 16 ³ / ₁₆
Quarter Guinea, 1	8		1 8 ⁵ / ₁₆	Shilling, - -	-	3 20 ² / ₁₆
				Six Pence, - -	-	1 12 ¹ / ₁₆

According to the above proportions it appears, that the value of a lb. of silver is 62 s. or 3 l. 2 s. and of a lb. of gold is 44 ¹/₂ guineas. or 46 l. 14 s. 6 d. Also that the oz. of silver is 5 s. 2 d. and the oz. of gold 3 l. 17 s. 10 ¹/₂ d. So that the value of the standard gold is 15 times that of the silver, and 1-14th more.

A TABLE of the KINGS and QUEENS, of ENGLAND
since the CONQUEST.

Kings and Queens	Born A.D.	Began their Reign	Reigned Y. M. D.	Rem. Deaths and Dethroned	Where buried
Will. Conq.	1027	1066 Oct. 14	20 10 26	Burst by Leap.	Caen, Norm
Will. Rufus	1057	1087 Sept. 9	12 10 24	Slain accidentally.	Winchester
Henry I.	1068	1100 Aug. 2	35 3 29		Reading
Stephen	1105	1135 Dec. 1	18 10 24		Feverham
Henry II.	1133	1154 Oct. 25	34 8 11		Fonteveraud
Richard I.	1156	1189 July 6	9 9 0	Slain with an Arrow.	Fonteveraud
John	1165	1199 April 6	17 6 12		Worcester
Henry III.	1207	1216 Oct. 19	56 0 28		Westminster
Edward I.	1239	1272 Nov. 16	34 7 21		Westminster
Edward II.	1284	1307 July 7	19 6 18		Gloucester
Edward III.	1312	1327 Jan. 25	50 4 27		Westminster
Richard II.	1366	1377 June 21	22 3 8	Dep. & murd.	Westminster
Henry IV.	1367	1399 Sept. 29	13 5 20		Canterbury
Henry V.	1389	1413 Mar. 20	9 5 11		Westminster
Henry VI.	1421	1422 Aug. 31	38 6 4	Dep. & murd.	Windfor
Edward IV.	1442	1461 Mar. 4	22 1 5		Windfor
Edward V.	1471	1483 April 9	0 2 15	Murder'd.	Not known
Richard III.	1443	1483 June 22	2 2 0	Slain in Battle.	Leicester
Henry VII.	1456	1485 Aug. 22	23 8 0		Westminster
Henry VIII.	1492	1509 April 22	37 9 6		Windfor
Edward VI.	1537	1547 Jan. 28	6 5 8		Westminster
Mary I.	1516	1553 July 6	5 4 11		Westminster
Elizabeth	1533	1558 Nov. 17	44 4 7		Westminster
James I.	1566	1603 Mar. 24	22 0 3		Westminster
Charles I.	1600	1625 Mar. 27	23 10 3		Windfor
Charles II.	1630	1649 Jan. 30	36 0 7		Westminster
James II.	1633	1685 Feb. 6	4 0 7	Abdicated.	St. Germain
Mary II.	1662	1689 Feb. 13	5 10 15		Westminster
William III.	1650	1689 Feb. 13	13 0 23		Westminster
Anne	1665	1702 Mar. 8	12 4 24		Westminster
George I.	1660	1714 Aug. 1	12 10 10		Hanover
George II.	1683	1727 June 11	33 4 14		Westminster
George III.	1738	1760 Oct. 25	Crowned Sept. 22, 1761.		

Above you view the Rise and Fall of Kings,
Whose Fate sometimes a useful Lesson brings.
Well if all Men could profit from the past!
Each know his Duty, each excel the last,
And justly execute his stated Task.

A TABLE of the most Reverend, Right Reverend, and Reverend, the ARCHBISHOPS, BISHOPS and DEANS, exercising Ecclesiastical Jurisdiction, 1789.

BISHOPS.	Sees.	Date.	Succeeded.	DEANS.
Dr. John Moore	{ Bangor	1775	Ewer deceased	
Arch-Bishop	{ Canterb. A. B.	1783	Cornwallis dec.	Dr. Horne
Dr. Will. Markham	{ Ch. ster	1771	Keene transl.	
Arch-Bishop	{ York A. B.	1777	Drummond de.	Dr. J. Fountayne
Dr. Beilby Porteus	{ Ch. ster	1776	Markham tran.	
	{ London	1787	Lowth deceas.	Bishop Pretyman
Dr. Tho. Thurlow	{ Lincoln	1770	Green dec.	
	{ Durham	1787	Egerton dec.	Hon. W. Digby
	{ Litch & Cov.	1771	Egerton transl.	
Hon. Dr. B. North	{ Worcester	1774	Johnson deceas.	
	{ Winchester	1781	Thomas deceas.	Dr. Ogle
Sir W. Ashburnham	{ Chichester	1754	Mawson transl.	Dr. Harward
Dr. Charles Mos.	{ St. David's	1766	L. with transl.	
	{ Bath & Wells	1774	Willes deceased	Ld. Fr. Seymour
Dr. J. Shipley	{ Landaff	1769	Ewer transl.	
	{ St. Asaph	1769	Newcome dec.	Mr. W.D. Shipley
Dr. S. Barrington	{ Llanaff	1769	Shipley transl.	
	{ Salisbury	1782	Hume dec.	Dr. John Ekins
Dr. John Hinchliffe	{ Peterborough	1769	Lamb dec.	Dr. Ch. Tarrant
	{ St. David's	1774	Moss transl.	
H. Dr. James Yorke	{ Gloucester	1779	Warburton dec.	
	{ Ely	1781	Keene deceased	Dr. Cooke
Dr. John Thomas	{ Rochester	1774	Pearce dec.	Dr. Dampier
Dr. Richard Hurd	{ Litch. & Cov.	1775	B. North tr.	
	{ Worcester	1781	B. North tr.	Dr. St. John
Dr. John Butler	{ Oxfrd	1777	Lowth transl.	
	{ Hereford	1788	Harley deceas.	Dr. Wetherell
Dr. John Rose	{ Exeter	1778	Keppel dec.	Dr. Buller
Dr. John Warren	{ St. David's	1779	Yorke transl.	
	{ Bangor	1783	Moore transl.	Dr. Tho. Lloyd
Dr. J. Cornwallis	{ Litch. & Cov.	1781	Hurd transl.	Dr. Proby
Dr. Samuel Hall fax	{ Gloucester	1781	Yorke transl.	Dr. Josiah Tucker
Dr. Lewis Bagot	{ Bristol	1782	Newton dec.	
	{ Norwich	1783	Yonge dec.	Dr. P. Lloyd
Dr. Richard Watf. n	{ Landaff	1782	Barrington tr.	Dr. Adams, A.D.
Dr. Edward Smalwel	{ St. David's	1783	Warren transl.	
	{ Oxford	1788	Butler transl.	Dr. Jackson
Dr. Christ. Wilson	{ Bristol	1783	Bagot transl.	Dr. Hallam
Dr. W. Pretyman	{ Lincoln	1787	Thurlow tran.	Dr. Kaye
Dr. John Douglas	{ Carlisle	1787	Law dec.	Dr. Jeffery Ekins
Dr. William Cleaver	{ Chester	1788	Porteus tran.	Dr. Cotton
Dr. Samuel Hurley	{ St. David's	1788	Smalwell tr.	Mr. Wollaston, P.
	{ Westminster	1768		Bishop Thomas
Dr. Claudius Crigan	{ Sodor & Man	1784	Mason dec.	
	{ Windor	1788		Bishop Douglas

A General INTEREST TABLE,

by which the Interest of any Sum, at any Rate, and for any Time, may be readily found.

Days	3 per Cent.			$3\frac{1}{2}$ per Cent.			4 per Cent.			$4\frac{1}{2}$ per Cent.			5 per Cent.		
	l.	s.	d.	q.	l.	s.	d.	q.	l.	s.	d.	q.	l.	s.	d.
1			1	3			2	1			3	0			3
2			3	3			4	2			6	0			6
3			5	3			6	3			8	3			9
4			7	3			9	0			11	3		1	1
5			9	3			11	2		1	1	1		1	4
6			11	3		1	1	3		1	3	3		1	7
7		1	1	3		1	4	0		1	6	1		1	11
8		1	3	3		1	6	1		1	9	0		2	2
9		1	5	3		1	8	2		1	11	2		2	5
10		1	7	2		1	11	0		2	2	1		2	8
20		3	3	1		3	10	0		4	4	2		5	5
30		4	11	0		5	9	0		6	6	3		8	2
40		6	6	3		7	8	0		8	9	0		10	11
50		8	2	2		9	7	0		10	11	2		13	8
60		9	10	1		11	6	0		13	1	3		16	5
70		11	6	0		13	5	0		15	4	0		19	2
80		13	1	3		15	4	0		17	6	1		1	11
90		14	9	2		17	3	0		19	8	2		4	7
100		16	3	1		19	2	0		1	11	0		7	4
200	1	12	10	2	1	18	4	1	2	3	10	0	2	14	9
300	2	9	3	3	2	17	6	1	3	5	9	0	3	14	2

N. B. This Table contains the interest of 100l. for all the several day in the 1st column, and at the several rates of 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, and 5 per cent. in the other 5 columns.

To find the interest of 100l. for any other time, as 1 year and 278 days, at $4\frac{1}{2}$ per cent. Take the sums for the several days here annexed.

The interest for 1 year	4	10	0
Against 200 days is	-	2	9
70 days	-	0	17
8 days	-	0	1
Interest required	-	7	18

For any other Sum than 100l. First find for 100l. as above, and take it so many times or parts as the sum is of 100l. Thus, to find for 355l. at $4\frac{1}{2}$ for 1 year and 278 days;

First, 3 times the above sum, (for 300l.) is	-	23	15
$\frac{1}{2}$ (for 50l.) is	-	3	19
$\frac{1}{10}$ of this (for 5l.) is	-	0	7
So for 355 it is	-	28	2

When the interest is required for any other rate than those in the table, may easily be made out from them. So $\frac{1}{2}$ of 5 is $2\frac{1}{2}$, $\frac{1}{2}$ of 4 is 2, $\frac{1}{2}$ of $3\frac{1}{2}$ is $1\frac{1}{4}$, $\frac{1}{3}$ of 3 is 1, 1-6th of 3 is $\frac{1}{2}$, and 1-12th of 3 is $\frac{1}{4}$. And so, by part or by adding or subtracting, any rate may be made out.

The LUNATIONS.

First quarter the 4th day, at 24 minutes past 4 afternoon.

Full Moon the 11th day, at 46 minutes past 5 afternoon.

Last quarter the 18th day, at 39 minutes past 8 morning.

New Moon the 26th day, at 21 minutes past 6 morning.

M.	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ south	Clock bef. ☉
1	Circumcision	8 4	3 56	22 8 57	4 8 19	9 36	3 24	4 23
2		8 4	3 56	22 52	0 16	10 41	4 22	4 51
3		8 3	3 57	22 46	4 32	11 46	5 3	5 19
4	S. aft. Christ.	8 2	3 58	22 39	8 53	morn.	5 46	5 46
5	Old Christ. Day	8 2	3 58	22 32	12 57	0 54	6 32	6 13
6	Epiphany	1 w. day	3 59	22 25	16 3	2 4	7 21	6 39
7		8 0	4 0	22 17	19 27	3 14	8 14	7 4
8	Lucian	7 59	4 1	22 9	21 20	4 25	9 11	7 30
9		7 58	4 2	22 0	21 57	5 30	10 10	7 54
10		7 57	4 3	21 51	21 8	6 26	11 13	8 18
11	S. aft. Epiph.	7 56	4 4	21 42	18 49	☽ rises	morn	8 42
12	Pl. w Mon. O. N. Y. D.	7 55	4 5	21 32	15 12	5 42	0 13	9 4
13	Hil. C. m. T. b.	7 54	4 6	21 21	10 34	7 8	1 11	9 27
14	Oxf. Term beg.	7 52	4 8	21 11	5 20	8 31	2 7	9 48
15		7 51	4 9	20 59	0 8	9 53	3 0	10 9
16		7 50	4 10	20 48	5 27	11 13	3 52	10 29
17	O. Twelfth Day	7 49	4 11	20 36	10 20	morn.	4 42	10 48
18	S. af. Ep. Q. Ch. b. d. k.	7 48	4 12	20 23	14 32	0 30	5 32	11 7
19		7 46	4 14	20 11	17 54	1 43	6 23	11 25
20	Fabian	7 45	4 15	19 58	20 17	2 55	7 14	11 43
21	Agnes	7 43	4 17	19 44	21 37	3 58	8 5	11 59
22	Vicent	7 42	4 18	19 30	21 52	4 52	8 56	12 15
23	Hil. Term beg.	7 40	4 20	19 10	21 5	5 38	9 46	12 30
24		7 39	4 21	19 1	19 20	6 17	10 34	12 44
25	S. a. Ep. Con. of St. Paul	7 38	4 23	18 46	16 45	6 48	11 22	12 58
26		7 36	4 24	18 3	13 20	☽ sets	0 6	13 10
27	Fr. Aug. Fr. b.	7 34	4 26	18 10	9 4	6 14	0 48	13 22
28		7 3	4 27	18 0	5 3	7 17	1 31	13 33
29		7 31	4 2	17 43	1 1	8 21	2 11	13 43
30	K. Cha. mart,	7 2	4 31	17 27	3 11	9 25	2 53	13 53
31		7 28	4 32	17 10	7 30	1 32	3 30	14 1
Days	Day increas.	Length of Day.	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	☽ sets.
1	0 8	7 52	11 37	23 48	17 47	11 38	11 34	20 58
7	0 16	8 0	11 49	24 18	13 21	11 45	11 15	16 20
13	0 28	8 12	12 0	24 47	16 58	12 52	10 54	13 12
19	0 44	8 28	12 12	25 17	20 36	12 58	10 32	10 48
25	1 2	8 46	12 24	25 46	24 15	1 6	10 20	7 14

1789.

January.

9

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	5 59	6 1	2 5	5 ♀ 50	1 s 49	0 n 25	0 s 52	1 n 47	0 s 3
7	5 56	6 4	2 4	5 37	1 48	0 26	0 54	1 34	1 1
13	5 52	6 8	2 2	5 18	1 48	0 27	0 56	1 19	1 4
19	5 46	6 14	2 0	4 59	1 47	0 28	0 58	1 3	1 5
25	5 39	6 21	1 58	4 40	1 47	0 28	1 0	0 45	2
Days	O's longitude		D's long.	D's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	11 38	10	6 X 31	5 n 11	6 X 50	26 35	10 32	5 ♀ 24	28 ♀ 5
2	12 39	22	18 25	5 5	6 55	26 27	11 18	6 37	29 1
3	13 40	33	0 V 25	4 46	7 1	26 20	12 4	7 51	1 3
D	14 41	44	12 37	4 14	7 6	26 12	12 50	9 4	3 1
5	15 42	54	25 5	3 29	7 11	26 4	13 37	10 18	4 4
6	16 44	4	7 8 53	2 33	7 17	25 56	14 23	11 31	6 1
7	17 45	13	21 6	1 26	7 22	25 48	15 9	12 45	7 5
8	18 46	21	4 11 46	0 13	7 28	25 40	15 55	13 58	9 2
9	19 47	30	18 55	1 s 3	7 33	25 32	16 41	15 12	10 5
10	20 48	37	3 26 30	2 18	7 39	25 24	17 28	16 25	12 3
D	21 49	43	18 21	3 24	7 45	25 16	18 14	17 3	14 8
12	22 50	50	3 3 36	4 17	7 51	25 8	19 0	18 53	15 4
13	23 51	56	18 48	4 53	7 57	25 0	19 47	20 7	17 2
14	24 53	1	3 11 53	5 7	8 3	24 52	20 33	21 20	18 5
15	25 54	6	18 41	5 1	8 0	24 44	21 20	22 34	20 3
16	26 55	11	3 2 7	4 35	8 15	24 35	22 7	23 48	22 1
17	27 56	15	17 7	3 54	8 22	24 27	22 53	25 2	23 5
D	28 57	19	0 11 41	3 0	8 28	24 19	23 40	26 16	25 2
19	29 58	23	13 51	1 59	8 34	24 11	24 27	27 30	27 1
20	30 59	26	26 41	0 53	8 40	24 3	25 14	28 4	28 4
21	2 0	28	9 ♀ 14	0 n 15	8 46	23 55	26 0	29 58	0 2
22	3 1	30	21 33	1 20	8 53	23 47	26 47	1 12	2 1
23	4 2	32	3 5 44	2 20	8 59	23 40	27 34	2 26	3 5
24	5 3	32	15 47	3 14	9 5	23 32	28 20	3 40	5 3
D	6 4	32	27 4	3 57	9 12	23 24	29 7	4 54	7 1
26	7 5	31	9 3 39	4 32	9 19	23 16	29 54	6 8	9 2
27	8 6	29	21 32	4 53	9 25	23 9	0 40	7 22	10 4
28	9 7	26	3 X 24	5 2	9 32	23 1	1 27	8 36	12 3
29	10 8	21	15 16	4 58	9 39	22 54	2 14	9 50	14 1
30	11 9	15	27 12	4 41	9 46	22 46	3 1	11 4	16 1
31	12 10	8	9 V 13	4 11	9 53	22 39	3 48	12 18	17 5
Days	u rises	δ rises	♀ rises	♂ rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	5 40	8 m 4	5 m 6	7 m 17	10 n 42	21 n 16	23 s 55	19 s 28	24 s
7	4 29	7 55	5 20	7 35	10 30	21 26	23 30	20 48	24 2
13	3 59	7 45	5 31	7 47	10 16	21 36	22 56	21 47	24
19	3 29	7 35	5 41	7 56	10 2	21 45	22 13	22 24	22 4
25	2 5	7 23	5 50	sets	9 47	21 54	21 20	22 37	20 2

10 February hath XXVIII Days. White.

The LUNATIONS.

First quarter the 3d day, at 25 minutes past 9 morning.

Full Moon the 10th day, at 8 minutes past 4 morning.

Last quarter the 16th day, at 10 minutes past 10 night.

New Moon the 25th day, at 14 minutes past 1 morning.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin	☾'s declin.	☾ rises & sets	☾ south	Clock bef. ☉	
1	4 S. aft. Epiph.	7 26	4 34	16 53	11 35	11 41	4 19	14 9	
2	Purif. Candlem.	7 24	4 36	16 35	15 16	morn	5 6	14 16	
3	Pla's	7 23	4 37	16 18	18 29	0 49	5 56	14 21	
4		7 21	4 3	15 59	20 33	1 56	6 45	14 27	
5	Agatha	7 19	4 41	15 41	21 41	3 4	7 46	14 34	
6		7 17	4 43	15 23	21 32	4 4	8 45	14 34	
7		7 15	4 45	15 4	19 58	4 55	9 46	14 37	
8	Septuagesima S.	7 14	4 46	14 45	17 1	5 39	10 45	14 39	
9		7 12	4 48	14 25	12 52	6 14	11 43	14 40	
10		7 10	4 50	14 6	7 51	☉ rises	morn	14 40	
11		7 8	4 52	13 46	2 22	7 18	0 40	14 39	
12	Hil. Term ends	7 6	4 54	13 26	3 12	8 45	1 34	14 38	
13	Jo Cand D.	7 4	4 56	13 6	8 25	10 4	2 27	14 36	
14	Valentine	7 3	4 57	12 45	13 2	11 22	3 20	14 33	
15	Sexagesima S.	7 1	4 59	12 25	16 46	morn	4 13	14 30	
16		6 59	5 1	12 4	19 30	0 38	5 6	14 25	
17		6 57	5 3	11 43	21 9	1 44	5 58	14 21	
18		6 55	5 5	11 21	21 41	2 44	6 50	14 15	
19		6 53	5 7	11 0	21 10	3 34	7 41	14 9	
20		6 51	5 9	10 38	19 40	4 14	8 30	14 2	
21		6 49	5 11	10 17	17 20	4 4	9 18	13 54	
22	Quinq. Shro. S.	6 47	5 13	9 55	14 17	5 16	10 3	13 46	
23	[thias Pr. AF. b.	6 45	5 15	9 33	10 42	5 41	10 47	13 37	
24	Shro. T. St. Mat.	6 43	5 17	9 11	6 4	6 1	11 29	13 28	
25	Ash Wednesday	6 41	5 19	8 48	2 24	☉ sets	0 21	13 18	
26		6 30	5 21	8 26	1 58	7 28	0 53	13 8	
27		6 38	5 22	8 3	6 18	8 25	1 30	12 57	
28		6 36	5 24	7 40	10 26	9 32	2 19	12 45	
M D	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♀	Helioc. long. ♂	h sets
1	1 24	9 8	12 37	26 20	28 34	13 11	1 27	6 37	7 1
7	1 46	9 30	12 49	26 40	2 16	19. 16	10 45	3 45	6 41
13	2 8	9 52	13 17	27 6	0 45	19 20	20 20	6 30	6 21
19	2 30	10 14	13 27	27 48	9 46	17 22	29 50	13 11	6 2
25	2 54	10 38	13 28	27 17	13 32	7 24	9 20	20 36	5 44

1789.

February.

II

Day	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	h's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	5 30	6 30	1 56	4 18	1 47	0 29	1 2	0 25	1 5
7	5 22	6 38	1 53	3 58	1 47	0 29	1 3	0 7	1 1
13	5 13	6 47	1 51	3 39	1 47	0 30	1 4	0 10	0 1
19	5 2	6 59	1 52	3 20	1 47	0 30	1 5	0 26	1 n
25	4 50	7 10	1 52	3 1	1 47	0 31	1 6	0 41	2 2
Days	☉'s longitude	☽'s long.	☽'s latitude	h's long.	h's long.	δ's long.	♀'s long.	♂'s long.	♂'s long.
D 1	13 10 59	21 24	3 n 30	10 36	22 31	4 35	13 33	18 3	
2	14 11 49	3 47	2 37	10 7	22 25	5 22	4 47	21 2	
3	15 12 37	16 29	1 36	10 13	22 18	0 9	16 12	23 1	
4	16 13 22	29 33	0 29	10 20	22 12	6 56	17 15	25	
5	17 14 7	13 11	0 43	10 27	22 5	7 43	18 29	26 4	
6	18 14 50	27 2	1 54	10 33	21 59	8 30	19 45	28 3	
7	19 15 32	11 30	3 1	10 40	21 52	9 17	20 57	0 2	
D 8	20 16 11	26 24	3 57	10 47	21 46	10 4	22 11	8 1	
9	21 16 49	11 38	4 37	10 54	21 40	10 51	23 26	3 5	
10	22 17 26	27 0	4 58	11 1	21 33	11 38	24 40	5 4	
11	23 18 1	12 19	4 58	11 8	21 27	12 25	25 54	7 2	
12	24 18 35	27 25	4 36	11 15	21 21	13 13	27 1	9	
13	25 19 8	2 6	3 57	11 23	21 16	14 0	28 22	10 4	
14	26 19 39	26 20	3 4	11 30	21 10	14 47	29 36	12 2	
D 15	27 20 9	10 3	2 2	11 37	21 5	15 34	30 50	13 5	
16	28 20 37	23 17	0 55	11 45	21 0	16 22	2 5	15 2	
17	29 21 6	6 7	0 n 13	11 52	20 55	17 9	3 19	16 4	
18	0 21 31	18 36	1 18	11 59	20 50	17 56	4 33	18	
19	1 21 55	0 50	2 18	12 7	20 46	18 43	5 4	19 2	
20	2 22 19	12 53	3 11	12 14	20 41	19 30	7 2	20 2	
21	3 22 40	24 49	3 55	12 21	20 37	20 18	8 16	21 2	
D 22	4 23 1	6 41	4 28	12 29	20 33	21 5	9 3	22 1	
23	5 23 19	18 32	4 50	12 36	20 29	21 52	10 4	23	
24	6 23 36	0 24	4 59	12 44	20 25	22 40	11 59	23 3	
25	7 23 52	12 18	4 55	12 51	20 21	23 27	13 14	23 5	
26	8 24 5	24 15	4 38	12 58	20 18	24 14	14 2	24 1	
27	9 24 17	6 17	4 9	13 6	20 15	25 2	15 42	24 1	
28	10 24 26	18 25	3 28	13 13	20 12	25 49	16 57	24 R 1	
Days	☽ fets	♂ rites	♀ rites	♂ fets	h's declin.	h's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	6 m 40	7 m 11	5 m 57	5 3	9 29	22 n 4	20 s 9	22 s 21	16 s 4
7	6 14	6 59	6 1	5 44	9 13	22 11	18 58	21 43	12 3
13	5 49	6 47	6 2	6 23	8 57	22 17	17 41	20 41	7 4
19	5 24	6 34	6 0	6 53	8 40	22 22	16 19	19 16	3 1
25	5 1	6 20	5 58	7 1	8 24	22 26	14 45	17 31	0

The LUNATIONS.

First quarter the 4th day, at 51 minutes past 10 night.

Full Moon the 12th day, at 50 minutes past 1 afternoon.

Last quarter the 18th day, at 15 minutes past 2 afternoon.

New Moon the 26th day, at 46 minutes past 6 afternoon.

M	Sundays & other D remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾rises & sets	☾ South	Clock bef. ☉	
1	Sun. in Lent	David	5 26	7 s 18	14 n 10	10 a 31	3 a 5	12 33	
2	Chad.	6 32	5 28	6 55	17 20	11 48	3 54	12 20	
3		6 30	5 30	6 32	19 45	morn	4 45	12 7	
4	Ember Week	6 28	5 32	6 9	21 11	0 54	5 39	11 54	
5		6 26	5 34	5 45	21 28	1 53	6 35	11 40	
6		6 24	5 36	5 22	20 29	2 46	7 33	11 25	
7	Perpetua	6 22	5 38	4 59	18 12	3 33	8 31	11 10	
8	2 Sund. in Lent	6 20	5 40	4 35	14 41	4 10	9 28	10 55	
9		6 18	5 42	4 12	10 11	4 42	10 25	10 39	
10		6 16	5 44	3 48	4 59	5 11	11 20	10 23	
11		6 14	5 46	3 25	0 s 32	Drises	morn	10 7	
12	Gregory	6 12	5 48	3 1	5 58	7 a 39	0 15	9 50	
13		6 10	5 50	2 38	10 57	9 0	1 9	9 33	
14		6 8	5 52	2 14	15 9	10 19	2 4	9 16	
15	3 Sund. in Lent	6 6	5 54	1 50	18 22	11 33	2 59	8 58	
16		6 4	5 56	1 27	20 27	morn	3 54	8 41	
17	St. Patrick	6 2	5 58	1 3	21 22	0 38	4 48	8 23	
18	Edm. K. W. S.	6 0	6 0	0 39	21 9	1 32	5 40	8 5	
19		5 58	6 2	0 16	19 56	2 16	6 31	7 47	
20		5 56	6 4	0 n 8	17 5	2 55	7 20	7 29	
21	Benedict	5 54	6 6	0 32	15 0	3 26	8 7	7 10	
22	Midlent Sund.	5 52	6 8	0 55	11 34	3 50	8 52	6 52	
23		5 50	6 10	1 19	7 42	4 13	9 35	6 33	
24		5 48	6 12	1 43	3 32	4 34	10 17	6 15	
25	Lady Day	5 46	6 14	2 6	0 n 48	4 53	10 59	5 56	
26		5 44	6 16	2 31	5 9	Drises	11 41	5 38	
27		5 42	6 18	2 53	9 27	7 a 31	0 a 25	5 19	
28		5 40	6 20	3 17	13 10	8 39	1 11	5 1	
29	5 Sund. in Lent	5 38	6 22	3 40	16 20	9 52	1 59	4 42	
30		5 36	6 24	4 3	19 5	10 54	2 50	4 24	
31		5 34	6 26	4 26	20 4	11 56	3 43	4 5	
Days	Day increaf.	Length of day	Helioc long. ♀	Helioc long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	ℓ sets.
1	3 8	10 52	13 37	18 37	16 3	11 22	15 39	13 19	5 32
7	3 32	11 16	13 44	29 6	9 50	17 25	25 8	12 44	sets
13	3 56	11 40	13 55	29 35	23 38	23 23	4 37	7 1	6 m 3
19	4 20	12 4	14 7	0 1	27 26	29 21	14 52	27 37	5 43
25	4 44	12 28	14 15	0 33	1 15	5 17	23 35	15 52	5 23

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	4 43	7 18	1 52	2 ♀ 45	1 s 47	0 n 31	1 s 6	0 s 50	3 n 17
7	4 30	7 31	1 53	2 ♀ 29	1 s 48	0 31	1 6	1 2	3 39
13	4 17	7 44	1 54	2 ♀ 10	1 s 48	0 31	1 6	1 12	2 53
19	4 4	7 57	1 55	1 s 51	1 s 48	0 31	1 6	1 20	1 28
25	3 50	8 11	1 57	1 32	1 s 49	0 31	1 5	1 25	0 0
Days	☉'s longitude		D's long.	D's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
D	11 24	34	0 8 42	2 n 37	13 20	20 10	26 36	18 11	24 4
2	12 24	39	13 9	1 37	13 27	20 8	27 23	19 25	23 42
3	13 24	42	25 51	0 32	13 34	20 5	28 10	20 39	23 11
4	14 24	42	8 II 52	0 s 37	13 42	20 3	28 58	21 53	22 34
5	15 24	40	22 14	1 46	13 49	20 1	29 45	23 8	21 50
6	16 24	36	6 50 1	2 51	13 56	20 9	0 X 32	24 22	21 1
7	17 24	30	20 15	3 47	14 4	19 57	1 19	25 36	20 8
D	18 24	22	4 54	4 30	14 11	19 56	2 6	26 50	19 12
9	19 24	12	19 53	4 56	14 18	19 55	2 53	28 4	18 14
10	20 23	59	5 II 5	5 1	14 26	19 54	3 40	29 18	17 15
11	21 23	44	20 19	4 45	14 33	19 53	4 28	0 X 33	16 17
12	22 23	27	5 24 4	4 10	14 40	19 52	5 15	1 47	15 22
13	23 23	8	20 11	3 18	14 47	19 52	6 2	3 1	14 30
14	24 22	48	4 II 32	2 14	14 54	19 51	6 49	4 15	13 42
D	25 22	26	18 25	1 5	15 2	19 50	7 36	5 30	12 59
16	26 22	2	1 48	0 n 6	15 9	19 D 50	8 24	6 44	12 21
17	27 21	36	14 44	1 14	15 17	19 50	9 11	7 59	11 49
18	28 21	8	27 17	2 17	15 24	19 51	9 58	9 13	11 23
19	29 20	39	9 33	3 12	15 32	19 52	10 45	10 27	11 2
20	30 20	8	21 36	3 57	15 39	19 53	11 32	11 42	10 42
21	1 19	35	3 30	4 31	15 46	19 54	12 19	12 56	10 40
D	2 19	1	15 21	4 54	15 53	19 55	13 6	14 10	10 D 38
23	3 18	25	27 11	5 4	16 0	19 57	13 53	15 24	10 42
24	4 17	47	9 X 5	5 1	16 7	19 58	14 40	16 38	10 51
25	5 17	7	21 3	4 44	16 14	20 0	15 27	17 52	11 5
26	6 16	25	3 7	4 15	16 22	20 2	16 14	19 6	11 21
27	7 15	41	15 20	3 34	16 29	20 4	17 1	20 20	11 47
28	8 14	55	27 40	2 42	16 36	20 7	17 48	21 35	12 17
D	9 14	7	10 8 10	1 42	16 43	20 9	18 35	22 49	12 51
30	10 13	16	22 51	0 35	16 50	20 12	19 22	24 1	13 28
31	11 12	23	5 II 45	0 s 34	16 57	20 14	20 9	25 17	14 9
Days	u's sets	δ's r f s	♀'s rises	♂'s sets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	4 m 45	6 m 12	5 m 55	6 a 49	8 s 12	22 n 27	13 s 42	16 s 11	0 n 39
7	4 22	6 0	5 49	6 5	7 56	22 29	12 3	13 58	0 s 34
13	4 0	5 46	5 43	rises	7 40	22 30	10 20	11 31	3 26
19	3 38	5 33	5 35	5 m 12	7 22	22 30	8 34	8 53	6 5
25	3 16	5 19	5 26	5 2	7 7	22 29	6 45	6 7	7 25

The LUNATIONS.

First quarter the 3d day, at 30 minutes past 8 morning.
 Full Moon the 9th day, at 24 minutes past 11 night.
 Last quarter the 17th day, at 50 minutes past 7 morning.
 New Moon the 25th day, at 57 minutes past 9 morning.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock bef. ☉	
1		5 32	6 28	4 n 49	21 n 17	morn	4 a 38	3 47	
2		5 31	6 30	5 12	20 39	0 51	5 34	3 29	
3	Rich. Cam. T.e.	5 28	6 32	5 35	18 47	1 3	6 30	3 10	
4	St Ambrose	Ox. T.e	6 34	5 58	15 46	2 16	7 26	2 53	
5	Palm Sunday	O.L.D.	6 36	6 21	11 45	2 50	8 21	2 35	
6		5 22	6 38	6 44	6 58	3 19	9 15	2 17	
7		5 20	6 40	7 6	1 44	3 41	10 8	2 0	
8		5 18	6 42	7 28	3 37	4 10	11 2	1 43	
9	Maundy Th.	5 17	6 43	7 51	8 45	(rises	11 57	1 26	
10	Good Friday	5 15	6 45	8 12	13 18	7 a 58	morn	1 9	
11		5 13	6 47	8 35	16 59	9 16	0 52	0 52	
12	Easter Day	5 11	6 49	8 57	19 34	10 26	1 47	0 36	
13	Easter Monday	5 9	6 51	9 18	20 57	11 28	2 43	0 21	
14	Easter Tuesday	5 7	6 53	9 40	21 10	morn	3 38	0 a f. 5	
15		5 5	6 55	10 1	20 16	0 19	4 31	0 10	
16		5 3	6 57	10 22	18 24	1 0	5 21	0 25	
17		5 1	6 50	10 43	15 46	1 33	6 9	0 39	
18		4 59	7 1	11 4	12 30	2 0	6 55	0 53	
19	Low Sunday	Alphe	7 3	11 25	8 46	2 24	7 39	1 6	
20		4 56	7 4	11 46	4 42	2 46	8 21	1 19	
21		4 54	7 6	12 6	0 21	3 5	9 3	1 32	
22	Ox. & Ca. T. beg.	4 52	7 8	12 26	3 n 54	3 24	9 45	1 44	
23	St. George	4 50	7 10	12 46	8 8	3 45	10 28	1 56	
24		4 48	7 12	13 6	12 6	4 6	11 13	2 7	
25	St. Mark. Prs. Ma. b.	7 1	13 25	15 36	(sets	0 a 1	2 17		
26	S. aft. Easter	4 45	7 15	13 44	18 25	8 a 50	0 52	2 28	
27		4 43	7 17	14 4	20 20	9 56	1 45	2 37	
28		4 41	7 19	14 22	21 9	10 53	2 40	2 47	
29	Easter T. beg.	4 39	7 21	14 4	20 47	11 43	3 36	2 55	
30		4 37	7 23	14 59	19 11	morn	4 32	3 3	
Days	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	☽ rises
1	5 12	12 56	14 32	15 6	5 42	12 11	4 40	5 35	4 m 58
7	5 36	13 20	14 44	1 35	9 30	18 5	14 10	22 4	4 38
13	6 58	13 42	14 56	2 4	13 18	23 57	23 42	8 59	4 17
19	6 22	14 6	15 8	2 33	17 6	29 49	3 14	27 5	3 52
25	6 44	14 28	15 19	3 22	20 52	5 m 39	12 47	17 21	3 35

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	s's latitude	q's latitude	g's latitude
1	3 33	8 28	2 0	1 ♀ 16	1 s 49	0 n 31	1 s 4	1 s 29	1 s 2
7	3 18	8 43	2 3	0 51	1 50	0 31	1 3	1 29	2
13	3 2	8 59	2 6	0 32	1 51	0 31	1 2	1 27	2
19	2 45	9 16	2 13	0 13	1 52	0 32	1 0	1 23	2
25	2 26	9 35	2 21	29 m 54	1 53	0 32	0 58	1 17	2
Days	☉'s longitude	☽'s long.	☽'s latitude	h's long.	u's long.	s's long.	q's long.	g's long.	
1	12 11 27	18 11 53	1 s 43	17 4 20	17 20 56	16 31	14 5		
2	13 10 29	20 18	2 48	17 11 20	20 21	43	27 45	15 4	
3	14 9 29	16 2	3 45	17 18 20	24 22	30	28 59	16 3	
4	15 8 27	0 5	4 30	17 24 20	27 23	16	0 13	17 2	
D	16 7 22	14 27	4 59	17 31 20	31 24	3	1 27	18 2	
6	17 6 15	29 4	5 9	17 38 20	35 24	50	2 41	19 2	
7	18 5 6	13 m 53	4 59	17 44 20	39 25	36	3 55	20 3	
8	19 3 55	28 46	4 29	17 51 20	44 26	23	5 9	21 3	
9	20 2 41	13 3	3 41	17 58 20	48 27	10	6 23	22 4	
10	21 1 25	28 8	2 37	18 4 20	53 27	56	7 37	23 5	
11	22 0 7	12 m 23	1 29	18 11 20	57 28	43	8 51	25	
D	22 58 47	26 15	0 14	18 18 21	2 29	30	10 5	26 2	
13	23 57 25	9 f 41	0 n 59	18 24 21	7 0	16	11 19	27 4	
14	24 56 2	22 42	2 6	18 31 21	12 1	3	12 33	28 9	
15	25 54 38	5 f 21	3 6	18 32 21	18 1	49	13 47	29 2	
16	26 53 12	17 41	3 55	18 43 21	23 2	35	15 1	30 4	
17	27 51 44	29 47	4 33	18 50 21	29 3	22	16 15	31 3	
18	28 50 14	11 m 44	4 59	18 56 21	35 4	8	17 29	32 3	
D	29 48 43	23 37	5 11	19 2 21	41 4	54	18 43	33 6	
20	30 47 11	5 f 29	5 11	19 8 21	47 5	40	19 57	34 3	
21	1 45 37	17 25	4 56	19 14 21	53 6	26	21 11	35 9	
22	2 44 1	29 27	4 29	19 20 22	0 7	13	22 25	36 10	
23	3 42 24	11 f 40	3 49	19 26 22	6 7	59	23 39	37 11	
24	4 40 45	24 3	2 58	19 32 22	13 8	45	24 53	38 12	
25	5 39 4	6 f 39	1 57	19 38 22	20 9	31	26 7	39 13	
D	6 37 21	19 27	0 50	19 44 22	27 10	17	27 21	40 14	
27	7 35 36	2 11 29	0 s 22	19 50 22	34 11	3	28 35	41 15	
28	8 33 50	15 44	1 33	19 55 22	42 11	49	29 49	42 16	
29	9 32 1	29 11	2 41	20 1 22	49 12	35	30 6	43 17	
30	10 30 11	12 f 51	3 41	20 7 22	57 13	21	31 17	44 18	
Days	☽ sets	☽ rises	☽ rises	☽ rises	h's declin.	u's declin.	s's declin.	q's declin.	g's declin.
1	2 m 52	5 m 3	5 m 16	4 m 54	6 s 47	22 n 27	4 s 35	2 s 45	7 s 1
7	2 31	4 48	5 6	4 47	6 32	22 23	2 43	0 n 12	5 1
13	2 11	4 34	4 57	4 41	6 18	22 19	0 51	3 9	3 1
19	1 50	4 19	4 47	4 34	6 4	22 14	1 n 1	6 4	0 n
25	1 31	4 5	4 37	4 27	5 50	22 8	2 53	8 54	3 1

The LUNATIONS:

First quarter the 2d day, at 2 minutes past 3 afternoon.

Full Moon the 9th day, at 22 minutes past 9 morning.

Last quarter the 17 h day, at 44 minutes past 1 morning.

New Moon the 24th day, at 20 minutes past 10 night.

First quarter the 31st day, at 44 minutes past 7 night.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☿'s declin.	☿ rises & sets	☿ South	Clock aft. ☉	
1	St. Phil. and Ja.	4 36	7 24	15 n 17	16 n 26	om 23	5 a 23	3 11	
2		4 34	7 26	15 35	12 43	o 57	6 21	3 18	
3	S. af. Easter	In. of C.	7 28	15 53	8 15	1 27	7 13	3 25	
4		4 31	7 29	16 10	3 1	1 53	8 5	3 31	
5		4 29	7 31	16 27	1 a 54	2 17	8 57	3 36	
6	St. John A.P.L.	4 27	7 33	16 44	6 5	2 42	9 49	3 41	
7		4 25	7 35	17 1	11 39	3 7	10 43	3 46	
8		4 24	7 36	17 17	15 37	3 37	11 38	3 49	
9		4 22	7 38	17 33	18 38	(rises morn		3 53	
10	S. af. Easter	4 21	7 39	17 48	20 30	9 a 17	o 33	3 55	
11		4 19	7 41	18 4	21 10	10 12	1 28	3 58	
12	Old May Day	4 18	7 42	18 19	20 39	10 56	2 22	3 59	
13		4 16	7 44	18 33	19 7	11 35	3 14	4 0	
14		4 14	7 46	18 48	16 41	morn	4 4	4 1	
15		4 13	7 47	19 2	13 35	o 5	4 51	4 0	
16		4 12	7 48	19 16	9 58	o 29	5 36	4 0	
17	Rogation Sun.	4 10	7 50	19 29	5 59	o 51	6 19	3 58	
18		4 9	7 51	19 42	1 47	1 10	7 0	3 56	
19	Q. Charlott. b.	Dunst.	7 53	19 55	2 n 31	1 30	7 42	3 54	
20		4 6	7 54	20 8	6 46	1 50	8 2	3 50	
21	Asc H. Thurs.	4 5	7 55	20 20	10 50	2 11	9 9	3 47	
22	Prs. Eliz. b.	4 3	7 57	20 32	14 30	2 36	9 56	3 42	
23		4 2	7 58	20 43	17 35	3 4	10 45	3 38	
24	S. after Ascen.	4 1	7 59	20 54	19 49	(sets	11 37	3 32	
25	Easter T. ends.	4 0	8	21 5	21 1	8 a 52	o a 32	3 27	
26	Augustin b.p.	3 59	8 2	21 15	21 0	9 39	1 20	3 26	
27	Venc. Be. c	3 57	8 3	21 25	19 42	10 23	2 26	3 13	
28	Oxf. Term ends	3 56	8 4	21 35	17 11	10 59	3 22	3 6	
29	K. Ch. s. restor.	3 55	8 5	21 44	13 38	11 30	4 17	2 59	
30		3 54	8 6	21 53	9 18	11 57	5 10	2 50	
31	Whit Sunday	3 53	8 7	22 1	4 26	morn	6 1	2 42	
Days	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ☿	h rises
1	7 4 14 48	15 31	3 31	24 38	11 17	22 21	10 54	3 13	
7	7 26 15 10	15 43	4 0	28 23	17 16	18 56	9 4	2 51	
13	7 44 15 28	15 55	4 2	29 7	23 3	11 32	12 8	2 28	
19	8 9 15 46	16 7	4 58	5 50	28 5	21 10	19 14	2 5	
25	8 16 16 0	16 18	5 26	9 31	4 36	0 14	26 23	1 42	

1789.

May.

17

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	2 4	9 58	2 34	29M35	1 s 54	0 n 32	0 s 50	1 s 8	1 s 55
7	1 46	10 16	2 41	29 16	1 55	0 32	0 54	0 58	1 6
13	1 19	10 44	3 0	28 57	1 56	0 32	0 51	0 47	0 6
19	0 43	11 22	4 29	28 38	1 53	0 32	0 48	0 34	0 n 56
25	No real night.			28 18	1 50	0 32	0 45	0 20	1 43
M D	☉'s longitude		☽'s long.	☽'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	8 11	28 19	26 43	4 s 28	20 12	23 5	14 7	3 8	26 13
2	12 26	25	10 46	5 1	20 18	23 13	14 53	4 44	28 5
D	13 24	29	24 59	5 15	20 23	23 21	15 39	5 58	29 59
4	14 22	30	9 12	5 10	20 28	23 29	16 24	7 11	1 50
5	15 20	29	23 45	4 46	20 34	23 37	17 10	8 25	3 54
6	16 18	27	8 10	4 4	20 39	23 46	17 56	9 39	5 54
7	17 16	23	22 30	3 6	20 44	23 54	18 41	10 53	7 55
8	18 24	17	6 41	1 58	20 49	24 3	19 27	12 7	9 58
9	19 12	10	20 36	0 43	20 54	24 11	20 12	13 21	12 2
D	20 10	1	11 15	0 n 22	20 59	24 20	20 58	14 34	14 8
11	21 7	51	17 33	1 44	21 4	24 29	21 43	15 48	16 15
12	22 5	39	0 31	2 48	21 9	24 38	22 29	17 2	18 23
13	23 3	26	13 11	3 43	21 13	24 47	23 14	18 16	20 33
14	24 1	12	25 33	4 26	21 18	24 56	24 0	19 30	22 44
15	24 58	57	7 42	4 56	21 23	25 5	24 45	20 44	24 55
16	25 56	41	19 41	5 13	21 27	25 15	25 30	21 57	27 6
D	26 54	24	1 35	5 17	21 32	25 24	26 15	23 11	29 18
18	27 52	6	13 29	5 6	21 36	25 34	27 0	24 24	1 29
19	28 49	47	25 26	4 43	21 40	25 44	27 45	25 38	3 40
20	29 47	47	7 32	4 7	21 44	25 54	28 3	26 52	5 50
21	II 0	43	19 50	3 19	21 48	26 4	29 15	28 6	7 59
22	1 42	44	2 22	2 20	21 52	26 14	0 8	0 29	10 7
23	2 40	22	15 11	1 13	21 56	26 24	0 45	0 33	12 13
D	3 37	59	28 18	0 122	0 26	35	1 30	1 47	14 18
25	4 35	34	11 43	1 s 12	22 4	26 45	2 14	3 1	16 21
26	5 33	7	25 23	2 23	22 8	26 55	2 59	4 15	18 22
27	6 30	39	9 17	3 27	22 11	27 6	3 43	5 29	20 21
28	7 28	10	23 21	4 19	22 15	27 16	4 28	6 42	22 17
29	8 25	40	7 33	4 56	22 18	27 27	5 12	7 56	24 11
30	9 23	9	21 48	5 14	22 22	27 37	5 57	9 10	26 3
D	10 20	36	6 4	5 14	22 25	27 48	6 41	10 23	27 51
Days	u's fets	δ's rifles	♀'s rifles	♂'s rifles	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	1 m 10	3 m 49	4 m 27	4 m 21	5 s 38	22 n c	4 n 43	11 n 37	8 n 20
7	0 50	3 33	4 18	4 16	5 27	21 52	6 30	14 11	13 7
13	0 29	3 18	4 10	fets	5 16	21 43	8 15	16 32	17 49
19	0 8	3 2	4 3	8 a 25	5 7	21 33	9 56	18 38	21 49
25	1 a 47	2 47	3 59	9 13	4 59	21 21	11 33	20 27	24 28

B

The LUNATIONS.

Full Moon the 7th day, at 17 minutes past 8 night.

Last quarter the 15th day, at 5 minutes past 7 night.

New Moon the 23d day, at 5 minutes past 8 morn.-ng.

First quarter the 29th day, at 16 minutes past 12 night.

M D	Sundays & other remark. days.	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉	
1	Whit-Monday	Nicom.	8 8	22 n 10	0 39	om 21	6 a 51	2 33	
2	Whit-Tuesday	3 51	8 9	22 17	5 41	0 46	7 41	2 24	
3	Ember week	3 51	8 9	22 25	10 23	1 10	8 34	2 14	
4	K. Geo III. born	3 50	8 10	22 32	14 29	1 36	9 26	2 4	
5	Pr. Er. Aug. b	Bonifa.	8 11	22 38	17 45	2 7	10 20	1 54	
6		3 48	8 12	22 44	19 59	2 43	11 14	1 43	
D	Trinity Sunday	3 48	8 12	22 50	21 4	☽ rises	morn	1 33	
8		3 47	8 13	22 55	20 59	8 a 47	0 8	1 22	
9		3 46	8 14	23 0	19 48	9 29	1 1	1 10	
10	Oxf. Term beg.	3 46	8 14	23 5	17 40	10 2	1 52	0 58	
11	St. Barnabas	Cor. Ch	8 15	23 9	14 46	10 29	2 41	0 47	
12	Trin. Ter. beg.	3 45	8 15	23 13	11 17	10 52	3 27	0 34	
13		3 44	8 16	23 16	7 23	11 12	4 10	0 22	
D	2 S. aft. Trin	3 44	8 16	23 19	3 14	11 31	4 52	0 10	
15		3 44	8 16	23 21	1 1	11 50	5 33	obef. 3	
16		3 43	8 17	23 24	5 16	morn	6 15	0 10	
17	St. Alban	3 43	8 17	23 25	9 23	0 10	6 58	0 29	
18		3 43	8 17	23 27	13 11	0 33	7 43	0 42	
19		3 43	8 17	23 27	16 29	0 59	8 30	0 55	
20	Trans. Ed. KWS	3 43	8 17	23 28	19 4	1 30	9 21	1 8	
D	3 S. aft. Trin	Lon. d.	8 17	23 28	20 42	2 9	10 15	1 21	
22		3 43	8 17	23 27	21 9	2 58	11 11	1 34	
23		3 43	8 17	23 27	20 19	☽ sets	0 a 9	1 47	
24	Nativ J Bapt.	3 43	8 17	23 25	18 10	8 a 51	1 7	2	
25		3 43	8 17	23 24	14 51	9 28	2 4	2 13	
26		3 44	8 16	23 22	10 36	9 56	2 59	2 25	
27		3 44	8 16	23 19	5 45	10 21	3 52	2 38	
D	3 S. aft. Trin.	3 44	8 16	23 17	0 37	10 45	4 43	2 5	
29	St. Peter	3 45	8 15	23 13	4 29	11 9	5 34	3 1	
30		3 45	8 15	23 10	9 17	11 34	6 25	3 11	
Day	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ☽	h rises
1	8 32	16 16	16 X 32	6 0	13 V 48	11 18	12 11 4	3 W 39	1 mi
7	8 40	16 24	16 44	6 29	17 26	17 2	21 45	29 30	0 5
13	8 48	16 32	16 56	6 58	21 2	22 46	1 27	21 1	0 2
19	8 50	16 34	17 7	7 26	24 36	28 30	11 10	10 11	4 0
25	8 50	16 34	17 19	7 55	28 9	4 V 13	20 54	27 21	11 15

1789.

June.

19

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1				27M56	2 s 1	0 n 32	0 s 41	0 s 4	2 n 7
7				27 37	2 2	0 32	0 38	0 n 10	1 58
13	No	real	night	27 18	2 4	0 33	0 34	0 24	1 23
19				26 59	2 6	0 33	0 30	0 38	0 24
25				26 40	2 7	0 33	0 26	0 50	0 s 55
M D	☉'s longitude		D's long.	D's latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	11 11	18 2	20 17	4 s 54	22 28	27 59	7 8 25	11 11 37	29 11 36
2	12 15	27 4	26 4	4 16 22	31 28	10 8	9 12	51 15	19 19
3	13 13	51 18	28 3	3 24 22	34 28	21 8	54 14	4 3	0
4	14 10	13 2	21 2	2 20 22	37 28	32 9	38 15	18 4	39
5	15 7	34 16	3 1	1 8 22	40 28	43 10	22 16	32 6	15
6	16 4	54 29	34 0	n 6 22	42 28	54 11	6 17	45 7	47
D	17 2	14 12	51 1	18 22	45 29	6 11	50 18	59 9	17
8	18 0	33 25	53 2	25 22	47 29	17 12	34 20	13 10	44
9	18 56	51 8	40 3	23 22	50 29	27 13	18 21	27 12	8
10	19 54	8 21	13 4	11 22	52 29	41 14	1 22	41 13	29
11	20 51	25 3	32 4	45 22	55 29	52 14	45 23	54 14	47
12	21 48	42 15	39 5	6 22	57 0	4 15	29 25	8 16	2
13	22 45	58 27	39 5	14 22	59 0	16 15	12 26	22 17	15
D	23 43	14 9	33 5	8 23	1 0	27 16	56 27	36 18	24
15	24 40	30 21	26 4	49 23	3 0	39 17	39 28	50 19	30
16	25 37	46 3	23 4	17 23	4 0	51 18	23 00	3 25	34
17	26 35	2 15	29 3	33 23	6 1	3 19	6 1	17 21	34
18	27 32	18 27	48 2	39 23	7 1	15 19	50 2	31 22	30
19	28 29	33 10	25 1	16 23	9 1	27 20	33 3	44 23	23
20	29 26	48 23	22 0	27 23	10 1	30 21	16 4	58 24	13
D	30 0	24 3	41 0	s 46 23	11 1	51 21	51 6	12 24	59
22	1 21	18 20	24 1	58 23	13 2	3 22	42 7	26 25	40
23	2 18	33 4	28 3	4 23	14 2	15 23	25 8	39 26	18
24	3 15	47 18	49 4	1 23	15 2	27 24	8 9	53 26	52
25	4 13	1 3	21 4	42 23	16 2	40 24	51 11	7 27	22
26	5 10	15 17	59 5	6 23	17 2	52 25	34 12	21 27	47
27	6 7	29 2	34 5	9 23	17 3	5 26	17 13	30 28	8
D	7 4	42 17	2 4	53 23	18 3	18 26	59 14	48 28	26
29	8 1	55 1	19 4	19 23	18 3	30 27	42 16	2 28	39
30	8 59	7 15	21 3	30 23	19 3	4 28	24 17	15 28	46
Days	u's fers	♂'s rises	♀'s sets	♂'s sets	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	11 22	2 m 28	8 4 9	9 2 52	4 s 51	21 n 7	13 n 21	22 n 8	25 n 35
7	11 0	2 13	8 23 10	7 4 45	20 53	14 48	23 11	25 7	
13	10 39	1 56	8 36 10	6 4 41	20 3	16 1	23 49	23 43	7
19	10 18	1 41	8 44 9	53 4 39	20 2	17 26	24 21	21 5	
25	9 56	1 27	8 50 9	31 4 37	20 7	18 35	23 50	19 49	

The LUNATIONS.

Full Moon the 7th day, at 31 minutes past 8 morning.
 Last quarter the 15th day, at 21 minutes past 11 morning.
 New Moon the 22d day, at 1 minute past 4 afternoon.
 First quarter the 29th day, at 20 minutes past 6 morning.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock bef. ☉	
1	Trin. Ter. ends	3 46	8 14	23 n 6	13 s 31	morn 6	7 a 18	3 26	
2	Visit. of B.V.M.	3 46	8 14	23 1	16 58	o 6	8 9	3 37	
3	Dog days begin	3 47	8 13	22 56	19 27	o 37	9 2	3 48	
4	Transf. St. Mart.	3 47	8 13	22 51	20 50	1 18	9 56	3 58	
5	Saft. Trin.	O.M.d.	8 12	22 45	21 7	2 10	10 49	4 9	
6		3 49	8 11	22 39	20 17	3 2	11 40	4 19	
7	Thos. a Becket	3 49	8 11	22 33	18 28	☾ rises	morn	4 28	
8	(Camb. Com.	3 50	8 10	22 26	15 49	8 a 25	o 29	4 37	
9		3 51	8 9	22 19	12 31	8 50	1 16	4 46	
10	Camb. Ter. ends	3 52	8 8	22 11	8 45	9 12	2 o	4 55	
11		3 53	8 7	22 3	4 41	9 32	2 43	5 3	
12	S. aft. Trin.	3 54	8 6	21 55	o 28	9 50	3 25	5 10	
13	Oxford Act	3 55	8 5	21 46	3 n 47	10 11	4 6	5 17	
14		3 56	8 4	21 37	7 54	10 31	4 48	5 24	
15	Swithun	3 57	8 3	21 27	11 46	10 55	5 31	5 30	
16		3 58	8 2	21 17	15 13	11 24	6 16	5 36	
17		3 59	8 1	21 7	18 4	11 58	7 4	5 41	
18	Oxf. T. ends	4 o	8 o	20 57	20 4	morn	7 56	5 46	
19	S. aft. Trin.	4 2	7 58	20 46	21 2	o 42	8 51	5 50	
20	Margaret	4 3	7 57	20 34	26 46	1 36	9 48	5 54	
21		4 4	7 56	20 23	19 11	2 42	10 47	5 57	
22	Magdalen	4 5	7 55	20 11	16 19	☾ sets	11 46	6 o	
23		4 7	7 53	19 58	12 20	7 a 54	o a 44	6 2	
24		4 8	7 52	19 46	7 35	8 22	1 39	6 3	
25	St. James	4 10	7 50	19 33	2 22	8 48	2 33	6 4	
26	S. aft. Trin.	St. An.	7 49	19 19	2 s 54	9 11	3 26	6 4	
27		4 12	7 48	19 6	7 55	9 37	4 18	6 4	
28		4 14	7 46	18 52	12 23	10 6	5 11	6 3	
29		4 15	7 45	18 38	16 4	10 38	6 4	6 1	
30		4 17	7 43	18 23	18 48	11 17	6 57	5 50	
31		4 18	7 42	18 8	20 28	morn	7 50	5 46	
13 th	Day deceaf	Length of day	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ☉	h rises
1	o 6	16 28	17 31	8 24	18 39	9 56	10 38	11 55	12 15
7	o 12	16 22	17 43	8 52	8 15	39	10 23	10 31	10 48
13	o 24	16 10	17 55	9 21	8 35	21	23	20 9	17 56
19	o 38	15 56	18 6	9 50	1 59	27	6	29 55	9 10
25	o 54	15 40	18 18	10 18	15 22	2 50	9 14	28 47	8 15

1789.

July.

21

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1				26M21	2 8 9	0 n 33	0 s 22	1 n 1	2 s 26
7	No	real	night	26 2	2 10	0 34	0 18	1 11	3 53
13				25 43	2 12	0 34	0 13	1 19	4 48
19				25 24	2 13	0 34	0 9	1 25	4 48
25	0 45	11 7	3 17	25 5	2 15	0 35	0 4	1 28	3 53
M D	☉'s longitude		D's long.	D's latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	26 9	56 18	29 29	2 29	23 19	3 56	29 8	18 29	28 48
2	10 53	30	12M48	1 21	23 19	4 8	29 49	19 43	18 46
3	11 50	41	26 3	0 10	23 19	4 21	0 13	20 57	18 40
4	12 47	52	9 10	1 n	12 19	4 34	1 13	22 10	28 30
D	13 45	3	22 4	2 7	23 19	4 46	1 56	23 24	28 15
6	14 42	14	4 47	3 6	23 19	4 59	2 38	24 37	27 55
7	15 39	25	17 19	3 54	23 19	5 12	3 20	25 51	27 30
8	16 36	36	29 41	4 31	23 19	5 25	4 2	27 5	27 2
9	17 33	48	11 52	4 55	23 18	5 38	4 44	28 19	26 31
10	18 30	59	23 55	5 6	23 18	5 51	5 25	29 32	25 58
11	19 28	11	5 52	5 22	23 17	6 4	6 7	0 46	25 22
D	20 25	24	17 44	4 46	23 16	6 17	6 49	1 59	24 44
13	21 22	38	29 36	4 18	23 15	6 30	7 30	3 13	24 3
14	22 19	52	11 31	3 38	23 15	6 43	8 12	4 27	23 22
15	23 17	7	23 35	2 48	23 14	6 56	8 53	5 41	22 43
16	24 14	23	5 52	1 50	23 13	7 9	9 35	6 55	22 2
17	25 11	40	18 27	0 45	23 12	7 22	10 16	8 8	21 24
18	26 8	57	1 25	0 25	23 10	7 35	10 57	9 22	20 40
D	27 6	16	14 49	1 35	23 8	7 48	11 38	10 36	20 15
20	28 3	35	28 40	2 41	23 7	8 1	12 19	11 50	19 45
21	29 0	54	12 58	3 40	23 5	8 14	13 0	13 4	19 20
22	29 58	15	27 39	4 26	23 3	8 27	13 41	14 17	18 59
23	0 55	37	12 34	4 54	23 1	8 40	14 22	15 31	18 43
24	1 52	59	27 36	5 32	22 59	8 54	15 3	16 44	18 33
25	2 50	21	12 34	4 51	22 57	9 7	15 44	17 58	18 26
D	3 47	44	27 20	4 19	22 55	9 20	16 25	19 12	18 20
27	4 45	8	11 48	3 32	22 53	9 33	17 6	20 26	18 35
28	5 42	31	25 55	2 32	22 50	9 46	17 46	21 40	18 4
29	6 39	56	9M40	1 25	22 48	10 0	18 27	22 53	19 9
30	7 37	21	23 4	0 15	22 46	10 13	19 7	24 7	19 35
31	8 34	47	6 10	0 n 55	22 43	10 26	19 48	25 21	20 7
Days	u's sets	♂'s rises	♀'s sets	♂'s sets	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s decl. n.
1	9 s 34	1 m 13	8 a 52	9 a 0	4 s 38	19 n 50	19 n 37	23 n 12	18 n 2
7	9 13	0 59	8 52	8 21	4 39	19 32	20 33	24 10	16 53
13	8 52	0 47	8 50	rises	4 42	19 17	21 22	20 45	16 36
19	8 31	0 36	8 44	3 m 47	4 46	18 54	22 4	18 58	17 11
25	8 10	0 25	8 37	3 11	4 52	18 34	22 38	16 52	18 21

The LUNATIONS.

Full Moon the 5th day, at 27 minutes past 10 night.

Last quarter the 14th day, at 5 minutes past 2 morning.

New Moon the 20th day, at 18 minutes past 11 night.

First quarter the 27th day, at 14 minutes past 3 afternoon.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock bef. ☉
1	Lammas day	4 20	7 40	17 53	21 8	0 2	8 43	5 52
D 2	8 S. aft Trin.	4 22	7 38	17 38	20 30	0 55	9 34	5 48
3		4 23	7 37	17 22	18 58	1 53	10 23	5 43
4		4 25	7 35	17 6	16 36	2 55	11 10	5 38
5		4 26	7 34	16 50	13 31	☾ rises	11 56	5 32
6	Transfiguration	4 28	7 32	16 33	9 55	7 17	morn	5 25
7	Prs. Amel. b.	N. of Jesus	30	16 16	5 57	7 38	0 40	5 18
8		4 31	7 29	15 59	1 48	7 58	1 22	5 10
D 9	9 S. aft. Trin.	4 33	7 27	15 42	2 25	8 17	2 4	5 2
10	St. Laurence	4 35	7 25	15 24	6 33	8 38	2 46	4 53
11	Prs. Brunf. b.	Dogd. e.	7 23	15 6	10 27	9 0	3 29	4 44
12	Pr. Wales b.	O. Lam	7 22	14 48	13 59	9 28	4 13	4 34
13		4 40	7 20	14 30	16 58	9 59	5 0	4 24
14		4 42	7 18	14 11	19 14	10 40	5 49	4 13
15	Assumption	4 44	7 16	13 53	20 35	11 26	6 41	4 1
D 16	10 S. aft. Trin.	4 45	7 15	13 33	20 51	morn	7 36	3 49
17	(D. of Yor. b.)	4 47	7 13	13 14	19 52	0 23	8 32	3 37
18		4 49	7 11	12 55	17 37	1 32	9 10	3 24
19		4 51	7 9	12 35	14 11	2 50	10 28	3 10
20		4 53	7 7	12 15	9 45	☾ sets	11 25	2 56
21	Pr. W. Hen. b.	4 54	7 6	11 55	4 40	6 50	0 22	2 43
22		4 56	7 4	11 35	0 43	7 18	1 18	2 27
D 23	11 S. aft. Trin.	4 58	7 2	11 15	5 59	7 44	2 13	2 12
24	St. Bartholom.	5 0	7 0	10 54	10 47	8 12	3 7	1 56
25		5 2	6 58	10 33	14 50	8 43	4 1	1 40
26		5 4	6 56	10 12	17 55	9 22	4 56	1 23
27		5 6	6 54	9 51	19 54	10 7	5 51	1 6
28	St. Augustin	5 8	6 52	9 30	20 45	10 57	6 44	0 49
29	Rehead. J. Bap.	5 9	6 51	9 9	20 31	11 53	7 36	0 31
D 30	12 S. aft. Trin.	5 11	6 49	8 47	19 15	morn	8 26	0 13
31		5 13	6 47	8 25	17 7	0 54	9 14	oast. 5
Day	Day decreas.	Length of day	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♂	Helioc. long. ♀	Helioc. long. ♂	h rises
1	1 14	15 20	18 32	10 52	19 8	16 9	32 21	17 29
7	1 34	15 01	18 44	11 20	22 34	15 17	35 02	18 1
13	1 54	14 40	18 56	11 49	25 50	11 3	37 10	27 7
19	2 16	14 18	19 8	12 17	29 4	26 49	20 8	35 14
25	2 38	13 56	19 19	12 46	2 16	23 37	29 47	38 18

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. (°'s node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	1 24	10 34	2 55	24m42	2 17	0 n 35	0 n 2	1 n 29	2 s 5
7	1 47	10 11	2 42	24 23	2 18	0 36	0 7	1 28	0 35
13	2 9	9 49	2 30	24 4	2 19	0 36	0 17	1 24	0 n 42
19	2 29	9 30	2 21	23 45	2 20	0 37	0 17	1 17	1 30
25	2 47	9 12	2 14	23 26	2 21	0 37	0 23	1 8	1 46
M D	☉'s longitude		D's long.	D's latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	Ω 9 32	13	19 7 1	2 n 0	22 40	10 39	20 28	26 35	40 46
D	10 29	40	1 38	2 57	22 37	10 52	21 8	27 49	21 31
3	11 27	8	14 4	3 46	22 35	11 5	21 48	29 22	22 22
4	12 24	36	26 22	4 23	22 32	11 18	22 28	om 16	23 20
5	13 22	5	8 32	4 48	22 29	11 32	23 8	1 29	24 24
6	14 19	35	20 34	4 59	22 26	11 45	23 47	2 45	25 33
7	15 17	7	2 32	4 57	22 23	11 57	24 27	3 56	26 47
8	16 14	40	14 25	4 43	22 20	12 11	25 7	5 10	28 7
D	17 12	14	26 16	4 16	22 17	12 24	25 46	6 24	29 33
10	18 9	50	8 7	3 38	22 13	12 38	26 26	7 37	1 4
11	19 7	27	20 1	2 50	22 10	12 51	27 5	8 51	2 38
12	20 5	5	2 3	1 54	22 6	13 4	27 45	10 4	4 17
13	21 2	45	14 18	0 52	22 2	13 17	28 24	11 18	6 1
14	22 0	27	26 49	0 14	21 59	13 30	29 3	12 32	7 48
15	22 58	11	9 43	1 22	21 55	13 43	29 42	13 45	9 38
D	23 55	56	23 3	2 27	21 51	14 56	om 21	14 59	11 30
17	24 53	43	6 53	3 25	21 48	14 10	1 0	16 13	13 24
18	25 51	31	21 12	4 13	21 44	14 23	1 39	17 26	15 20
19	26 49	21	5 58	4 46	21 40	14 36	2 18	18 40	17 17
20	27 47	12	21 4	5 0	21 36	14 49	2 56	19 54	19 15
21	28 45	5	6 20	4 53	21 32	15 2	3 35	21 7	21 14
22	29 43	0	21 35	4 25	21 28	15 15	4 13	22 21	23 13
D	30 40	56	6 38	3 39	21 24	15 28	4 52	23 34	25 12
24	1 38	53	21 21	2 39	21 19	15 41	5 30	24 48	27 12
25	2 36	52	5 38	1 30	21 15	15 54	6 8	26 1	29 11
26	3 34	52	19 29	0 18	21 11	16 7	6 46	27 15	1 9
27	4 32	53	2 54	0 n 52	21 7	16 20	7 24	28 28	3 7
28	5 30	55	15 57	1 59	21 2	16 33	8 2	29 42	5 4
29	6 28	59	28 40	2 57	20 58	16 46	8 40	om 55	7 0
D	7 27	4	1 7	3 46	20 53	16 58	9 17	2 9	8 55
31	8 25	11	23 23	4 23	20 49	17 11	9 55	3 22	10 49
Days	u's rises	♂'s rises	♀'s sets	♂'s rises	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	4 m 23	om 15	8 a 26	2 m 48	5 s 0	18 n 5	23 n 9	14 n 4	19 n 44
7	4 6	0 7	8 17	2 50	5 8	17 48	23 28	11 26	20 15
13	3 50	0 0	8 7	3 14	5 17	17 26	23 39	8 37	19 28
19	3 35	1 a 54	7 56	3 54	5 27	17 4	23 44	5 40	17 6
25	3 20	11 49	7 46	4 39	5 38	16 41	23 42	2 38	13 26

The LUNATIONS.

Full Moon the 4th day, at 7 minutes past 2 afternoon.

Last quarter the 12th day, at 54 minutes past 2 afternoon.

New Moon the 19th day, at 6 minutes past 7 morning.

First quarter the 26th day, at 48 minutes past 3 morning.

M	Sundays & other D remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉
1	Giles	5 15	6 45	8 n 3	14 s 15	1 m 59	10 a 0	0 24
2	Lond. bur. 1666	5 17	6 43	7 42	10 50	3 5	10 44	0 43
3		5 19	6 41	7 19	7 0	4 10	11 27	1 2
4		5 21	6 39	6 57	2 56	☽ rises	morn	1 22
5		5 24	6 37	6 35	1 n 14	6 a 30	0 10	1 42
6	3 S. aft. Trin.	5 25	6 35	6 13	5 22	6 52	0 52	2 2
7	Eunuchine	5 27	6 33	5 50	9 19	7 15	1 34	2 22
8	Nativ. of V. M.	5 29	6 31	5 27	12 55	7 39	2 18	2 42
9		5 31	6 29	5 5	16 1	8 9	3 4	3 3
10		5 32	6 28	4 42	18 26	8 45	3 52	3 23
11		5 34	6 26	4 19	20 2	9 28	4 42	3 44
12		5 36	6 24	3 56	20 30	10 21	5 35	4 5
13	4 S. aft. Trin.	5 38	6 22	3 33	20 8	11 25	6 29	4 26
14	Holy Crofs	5 40	6 20	3 10	18 26	morn	7 25	4 47
15		5 42	6 18	2 47	15 36	0 36	8 21	5 8
16	Ember week	5 44	6 16	2 24	11 42	1 52	9 17	5 29
17	Lambert	5 46	6 14	2 0	7 0	3 15	10 13	5 50
18		5 48	6 12	1 37	1 47	4 38	11 8	6 10
19		5 50	6 10	1 14	3 34	☽ sets	0 a 4	6 31
20	5 S. aft. Trin.	5 52	6 8	0 50	8 40	6 a 21	1 1	6 52
21	St. Matthew	5 54	6 6	0 27	13 8	6 52	1 57	7 13
22	K. Geo. 3. cro.	5 56	6 4	0 3	16 41	7 28	2 54	7 33
23		5 58	6 2	0 20	19 8	8 10	3 50	7 54
24		6 0	6 0	0 44	20 22	9 0	4 45	8 14
25		6 2	5 58	1 7	20 27	9 56	5 39	8 35
26	St. Cyprian	6 4	5 56	1 30	19 27	10 57	6 31	8 55
27	6 S. aft. Trin.	6 6	5 54	1 54	17 33	morn	7 21	9 15
28		6 8	5 52	2 17	14 52	0 1	8 8	9 34
29	St. Mic. Pres. Cho.	A.M.b.	5 50	2 41	11 37	1 7	8 53	9 54
30	St. Jerom	6 12	5 48	3 4	7 56	2 12	9 37	10 13
Day	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	☽ rises
1	3 4 13 3'	19 33	13 19	5 11 57	9 23	11 11 0	11 23 34	7 a 10
7	3 28 13 6	19 45	13 48	9 5	15 15	20 36	14 25	6 47
13	3 50 13 4	19 57	14 16	12 11	21 3	0 9	4 11 5	sets
19	4 14 13 20	20 9	14 45	15 15	26 55	9 41	21 47	5 m 5
25	4 38 13 51	20 21	15 13	18 17	27 4	19 13	8 29	4 41

1789.

September.

25

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	H's latitude	U's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	3 7	8 52	2 7	23m 4	2 s 22	0 n 38	0 n 29	0 n 55	1 n 34
2	3 23	8 36	2 3	22 45	2 s 22	0 n 39	0 35	0 41	1 6
13	3 38	8 21	1 59	22 26	2 23	0 40	0 41	0 26	0 28
19	3 52	8 7	1 57	22 7	2 23	0 41	0 47	0 9	0 s 15
25	4 5	7 54	1 57	21 48	2 23	0 41	0 53	0 8	1 0
M D	☉'s longitude		D's long.	D's latitude	H's long.	U's long.	♂'s long.	♀'s long.	♂'s long.
1	9 23	19	5m 30	4 n 48	20 44	17 23	10 32	4 35	12m 42
2	10 21	28	17 31	5 0	20 40	17 36	11 10	5 49	14 34
3	11 19	39	29 27	4 59	20 35	17 49	11 47	7 2	16 25
4	12 17	51	11 20	4 44	20 31	18 1	12 24	8 15	18 14
5	13 16	5	23 12	4 18	20 26	18 14	13 2	9 29	20 2
D	14 14	21	5 3	3 40	20 22	18 27	13 39	10 42	21 49
7	15 12	39	16 57	2 52	20 17	18 39	14 16	11 55	23 35
8	16 10	59	28 54	1 57	20 13	18 52	14 53	13 8	25 20
9	17 9	21	10 59	0 55	20 8	19 4	15 29	14 22	27 4
10	18 7	46	23 15	0 s 10	20 4	19 16	16 6	15 35	28 46
11	19 6	12	5 11	1 16	19 59	19 29	16 42	16 49	0 27
12	20 4	41	18 37	2 21	19 54	19 41	17 19	18 2	2 8
D	21 3	13	1 51	3 19	19 49	19 53	17 55	19 15	3 48
14	22 1	45	15 33	4 8	19 45	20 5	18 31	20 28	5 27
15	23 0	21	29 43	4 44	19 40	20 17	19 7	21 41	7 4
16	23 58	59	14 20	5 3	19 36	20 29	19 43	22 55	8 40
17	24 57	39	29 19	5 2	19 31	20 41	20 19	24 8	10 15
18	25 56	21	14m 33	4 40	19 27	20 53	20 55	25 21	11 49
19	26 55	6	29 50	3 58	19 22	21 4	21 30	26 34	13 23
D	27 53	52	15 0	2 59	19 18	21 16	22 6	27 47	14 56
21	28 52	40	29 53	1 49	19 13	21 28	22 41	29 0	16 27
22	29 51	30	14m 21	0 33	19 9	21 39	23 16	om 13	17 57
23	0 50	22	28 22	0 n 42	19 4	21 51	23 51	1 26	19 27
24	1 49	15	11 55	1 53	19 0	22 3	24 26	2 39	20 56
25	2 48	10	25 2	2 55	18 55	22 14	25 1	3 52	22 23
26	3 47	7	7 54	3 47	18 51	22 26	25 35	5 5	23 50
D	4 46	5	20 12	4 27	18 47	22 37	26 10	6 18	25 15
28	5 45	5	2 24	4 54	18 42	22 48	26 44	7 31	26 39
29	6 44	7	14 26	5 7	18 38	23 0	27 19	8 43	28 2
30	7 43	11	16 22	5 7	18 33	23 11	27 53	9 56	29 25
Days	☿ rises	♂ rises	♀ sets	♂ sets	H's declin.	U's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	3 m 4	11 a 44	7 a 33	7 a 1	5 s 51	16 n 15	23 13	0 s 59	8 n 15
7	2 49	11 40	7 22	6 54	6 2	15 52	23 17	4 5	3 33
13	2 34	11 37	7 12	6 45	6 13	15 30	22 56	7 8	1 s 5
19	2 21	11 34	7 2	6 36	6 24	15 8	22 31	10 6	5 31
25	2 6	11 30	6 52	6 25	6 35	14 46	22 2	12 57	9 59

The LUNATIONS.

Full Moon the 4th day, at 5 minutes past 7 morning.

Last quarter the 12th day, at 37 minutes past 1 morning.

New Moon the 18th day, at 19 minutes past 4 afternoon.

First quarter the 25th day, at 8 minutes past 8 night.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock aft. ☉	
1	Remigius	6 14	5 46	3 27	3 57	3m 17	10 19	10 32	
2		6 16	5 44	3 51	0 10	4 21	11 0	10 51	
3		6 18	5 42	4 14	4 18	5 25	11 42	11 9	
D 4	17 S. aft. Trin.	6 20	5 40	4 37	8 17	☾ rises morn	11 27	11 27	
5		6 22	5 38	5 0	11 59	5 2 53	0 26	11 45	
6	Faith	6 24	5 36	5 23	15 11	6 22	1 11	12 2	
7		6 26	5 34	5 46	17 47	6 55	1 58	12 19	
8		6 28	5 32	6 9	19 34	7 36	2 47	12 36	
9	St. Denys	6 29	5 31	6 32	20 25	8 24	3 38	12 52	
10	Ox. & Cam. T.b.	O. Mic.	Day 29	6 55	20 12	9 21	4 31	13 7	
D 11	18 S. aft. Trin.	6 33	5 27	7 17	18 53	10 29	5 25	13 22	
12		6 35	5 25	7 40	16 28	11 40	6 20	13 36	
13	Tr. K. Edward	6 37	5 23	8 3	13 3	morn	7 14	13 50	
14		6 39	5 21	8 25	8 48	0 59	8 8	14 4	
15		6 41	5 19	8 47	3 57	2 19	9 2	14 16	
16		6 43	5 17	9 9	1 14	3 40	9 56	14 29	
17	Etheldred	6 45	5 15	9 31	6 23	5 2	10 50	14 40	
D 18	19 S. aft. Trin. St. Luke	5 13	9 53	11 8	☾ sets	11 46	14 51	14 51	
19		6 49	5 11	10 15	15 8	5 29	0 44	15 2	
20		6 51	5 9	10 36	18 7	6 10	1 42	15 11	
21		6 53	5 7	10 58	19 53	6 56	2 39	15 20	
22		6 55	5 5	11 19	20 25	7 51	3 35	15 29	
23		6 56	5 4	11 40	19 46	8 52	4 29	15 36	
24		6 58	5 2	12 1	18 6	9 56	5 20	15 43	
D 25	20 S. aft. Trin. K. G. 3. at. Crif.	12 22	15 37	11 0	6 8	15 50			
26	K. Geo. III. pr.	7 2	4 58	12 42	12 30	morn	6 54	15 55	
27		7 4	4 56	13 2	8 54	0 6	7 38	16 0	
28	St. Sim. & Jude	7 6	4 54	13 23	5 0	1 12	8 20	16 5	
29		7 8	4 52	13 42	0 56	2 15	9 2	16 8	
30		7 9	4 51	14 2	3 11	3 20	9 44	16 11	
31		7 11	4 49	14 22	7 12	4 25	10 27	16 13	
Days	Day decreaf.	Length of day	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	☾ sets
1	5 2	11 32	20 33	15 42	21 17	8 42	28 43	25 0	4m 17
7	5 26	11 8	20 44	16 10	24 16	14 38	8 12	12 38	3 53
13	5 48	10 46	20 56	16 38	27 13	20 34	17 4	10 28	3 29
19	6 11	10 22	21 8	17 7	0 9	26 32	27 10	21 13	3 4
25	6 23	10 0	21 20	17 35	3 31	28 31	6 39	15 29	2 40

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	4 18	7 41	1 55	21m 29	2 8 22	0 n 42	1 n 0	0 s 27	1 s 43
7	4 31	7 28	1 54	21 10	2 22	0 43	1 7	0 45	2 22
13	4 43	7 16	1 53	20 51	2 22	0 44	1 14	1 4	2 52
19	4 55	7 4	1 53	20 31	2 21	0 45	1 21	1 21	3 6
25	5 6	6 53	1 53	20 12	2 20	0 47	1 29	1 38	2 50
M D	☉'s longitude	☽'s long.	☽'s latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.	
1	8 42 16	8 14	4 n 54	18 29	23 22	28 27	11m 9	0m 47	
2	9 41 23	20 6	4 28	18 25	23 33	29 1	12 22	2 8	
3	10 40 33	1 58	3 50	18 20	23 44	29 35	13 35	3 27	
D	11 39 44	13 54	3 2	18 16	23 54	0 8	14 48	4 44	
5	12 38 57	25 55	2 6	18 12	24 5	0 44	16 0	6 0	
6	13 38 12	8 1	1 3	18 8	24 15	1 17	17 13	7 15	
7	14 37 30	20 16	0 s 3	18 5	24 26	1 49	18 26	8 29	
8	15 36 50	2 42	1 11	18 1	24 36	2 22	19 39	9 41	
9	16 36 13	15 20	2 16	17 57	24 46	2 54	20 52	10 51	
10	17 35 38	28 15	3 16	17 54	24 57	3 27	22 4	11 59	
D	18 35 5	11 29	4 6	17 50	25 7	3 59	23 17	13 5	
12	19 34 35	25 4	4 45	17 46	25 17	4 32	24 29	14 9	
13	20 34 7	9 3	5 8	17 43	25 27	5 4	25 42	15 11	
14	21 33 41	23 24	5 13	17 40	25 37	5 36	26 55	16 10	
15	22 33 18	8 5	4 58	17 36	25 46	6 8	28 7	17 6	
16	23 32 57	23 0	4 22	17 33	25 56	6 39	29 19	17 59	
17	24 32 38	8 2	3 28	17 29	26 5	7 11	0 32	18 49	
D	25 32 21	23 2	2 20	17 26	26 15	7 43	1 44	19 35	
19	26 32 6	7m 51	1 3	17 23	26 24	8 14	2 56	20 16	
20	27 31 53	22 21	0 n 16	17 20	26 33	8 45	4 8	20 52	
21	28 31 42	6 28	1 33	17 17	26 42	9 15	5 21	21 23	
22	29 31 34	20 8	2 42	17 14	26 51	9 46	6 33	21 49	
23	m 0 31 27	3 52	3 39	17 1	27 0	10 16	7 45	22 8	
24	1 31 22	16 12	4 24	17 9	27 0	10 47	8 58	22 20	
D	2 31 18	28 42	4 56	17 6	27 18	11 17	10 10	22 R 25	
26	3 31 16	10 55	5 13	17 4	27 26	11 46	11 22	22 21	
27	4 31 15	22 57	5 16	17 1	27 35	12 16	12 34	22 9	
28	5 31 16	4 51	5 5	16 59	27 43	12 45	13 46	21 48	
29	6 31 19	16 42	4 41	16 57	27 51	13 14	14 58	21 17	
30	7 31 23	28 34	4 6	16 55	27 59	13 43	16 10	20 37	
31	8 31 29	10 30	3 19	16 53	28 7	14 12	17 22	19 47	
Days	u rises	♂ rises	♀ sets	♂ sets	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	1 50	11 27	6 44	6 14	6 s 45	14 n 25	21 n 29	15 s 37	13 s 22
7	1 34	11 23	6 36	6 3	6 54	14 4	20 52	18 4	16 35
13	1 17	11 18	6 30	5 52	7 2	13 45	20 13	20 14	19 9
19	1 0	11 14	6 26	5 39	7 9	13 26	19 32	22 6	20 49
25	0 43	11 8	6 23	5 23	7 15	13 9	18 50	23 37	21 8

The LUNATIONS.

Full Moon the 2d day, at 22 minutes past 12 night.

Last quarter the 10th day, at 30 minutes past 10 morn.

New Moon the 17th day, at 29 minutes past 3 morn.

First quarter the 24th day, at 42 minutes past 3 afternoon.

M D	Sundays & other remark. days	☉ rites	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock aft. ☉
1	22 S. aft. Tr. All	Saints 3	4 47	14 41	10 n 59	5 m 30	11 2 12	16 14
2	Pr. Edw. b.	Soul 15	4 45	15 0	14 21	☾ rises	11 59	16 14
3	Pr. Sophia b.	7 17	4 43	15 19	17 9	5 a 1	morn	16 14
4		7 18	4 42	15 37	19 10	5 38	0 48	16 12
5	Powder Plot	7 20	4 40	15 55	20 14	6 25	1 39	16 10
6	Leonard. Mich.	Ter. b	4 38	16 13	20 16	7 19	2 31	16 7
7	D. Cumberl. L.	7 22	4 36	16 31	19 12	8 21	3 24	16 3
8	22 S. aft. Tr. Pis.	A St 24	4 35	16 48	17 3	9 32	4 17	15 59
9	Ld. Mayor's day	at Lon.	4 33	17 5	13 56	10 46	5 10	15 53
10		7 29	4 31	17 22	9 59	morn	6 3	15 47
11	St Martin.	7 30	4 30	17 39	5 26	0 3	6 55	15 39
12		7 32	4 28	17 55	0 31	1 21	7 47	15 31
13	Britius	7 33	4 27	18 11	4 30	2 41	8 39	15 22
14		7 35	4 25	18 26	9 18	4 1	9 32	15 12
15	23 S. aft. Trin.	Mach.	4 23	18 42	13 33	5 22	10 27	15 1
16		7 38	4 22	18 57	10 57	6 40	11 24	14 50
17	Hugh B. of Lin.	7 40	4 20	19 11	19 15	☾ sets	0 a 21	14 37
18		7 41	4 19	19 26	20 19	5 a 34	1 18	14 24
19		7 42	4 18	19 39	20 9	6 33	2 14	14 10
20	Edmund K & M.	7 44	4 16	19 53	18 51	7 37	3 8	13 55
21		7 45	4 15	20 6	16 36	8 42	3 58	13 39
22	24 S. aft. Trin.	Cæcilin	4 13	20 19	13 37	9 49	4 45	13 23
23	St. Clement.	7 48	4 12	20 31	10 8	10 55	5 30	13 6
24		7 49	4 11	20 44	6 17	morn	6 13	12 48
25	D. Glof. born	Cather.	4 9	20 55	2 14	0 0	6 55	12 29
26		7 52	4 8	21 6	1 n 53	1 4	7 36	12 9
27		7 53	4 7	21 17	5 56	2 7	8 18	11 49
28	Mic. Term end.	7 54	4 6	21 28	9 48	3 11	9 1	11 29
29	Adv. Sunday.	7 55	4 5	21 38	13 20	4 16	9 47	11 7
30	St. Andrew.	7 56	4 4	21 48	16 20	5 21	10 35	10 45
Day	decreaf.	Length of day	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	☾ sets
1	7 0	9 34	21 34	18 6	6 24	9 32	17 43	19 55
7	7 22	9 12	21 46	18 36	9 15	15 33	27 12	25 8
13	7 40	8 54	21 58	19 4	12 5	21 36	6 42	22 43
19	7 58	8 36	22 10	19 31	14 53	27 39	16 13	8 17
25	8 16	8 18	22 22	20 1	17 40	3 44	25 45	8 14

Days	Daylig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	5 17	6 42	1 55	19m 50	2 19	0 n 48	1 n 38	1 8 55	1 8 29
7	5 25	6 35	1 59	19 31	2 18	0 49	1 47	2 8	0 n 30
13	5 33	6 27	2 0	19 12	2 17	0 51	1 56	2 18	2 2
19	5 41	6 19	2 1	18 53	2 16	0 52	2 6	2 24	2 28
25	5 48	6 12	2 3	18 34	2 15	0 54	2 16	2 28	2 10
M D	☉'s longitude.		D's long.	D's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
D	m 9	31 36	22 31	2 n 23	16 51	28 15	14 41	18 34	18 m 46
2	10	31 46	4 42	1 20	16 49	28 23	15 9	19 46	17 41
3	11	31 57	17 3	0 13	16 47	28 30	15 37	20 58	16 28
4	12	32 10	29 34	0 8 56	16 46	28 38	16 4	2 9	15 12
5	13	32 25	12 11 18	2 4	16 44	28 45	16 32	23 21	13 53
6	14	32 42	25 15	3 6	16 43	28 52	17 0	24 33	12 34
7	15	33 0	8 25	4 0	16 42	28 5	17 27	25 44	11 17
D	16	33 20	21 49	4 42	16 40	29 6	17 54	26 56	10 6
9	17	33 43	5 29	5 8	16 39	29 12	18 21	28 7	9 3
10	18	34 9	19 23	5 18	16 38	29 19	18 47	29 18	8 8
11	19	34 36	3 32	5 8	16 37	29 25	19 13	30 30	7 24
12	20	35 5	17 53	4 39	16 36	29 31	19 3	1 41	6 53
13	21	35 36	2 23	3 53	16 36	29 37	20 3	2 52	6 33
14	22	36 9	16 58	2 51	16 35	29 43	20 28	4 3	6 D 24
D	23	36 44	1 13 33	1 37	16 35	29 48	20 53	5 14	6 27
16	24	37 20	16 2	0 19	16 35	29 54	21 17	6 25	6 39
17	25	37 58	0 19	1 n 0	16 34	29 59	21 42	7 36	6 58
18	26	38 37	14 19	2 14	16 34	0 12 5	22 6	8 47	7 30
19	27	39 18	27 58	3 18	16 D 34	0 10	22 29	9 58	8 13
20	28	40 1	1 14 14	4 10	16 34	0 15	22 52	11 9	9 2
21	29	40 44	24 8	4 47	16 34	0 19	23 14	12 19	9 55
D	1 0	41 29	6 42	5 9	16 35	0 24	23 37	13 30	10 53
23	1 42	14	18 59	5 17	16 35	0 28	23 59	14 40	11 58
24	2 43	1	1 5	5 10	16 35	0 33	24 21	15 51	13 9
25	3 43	49	12 57	4 50	16 36	0 37	24 42	17 1	14 21
26	4 44	37	24 48	4 18	16 36	0 41	25 3	18 11	15 34
27	5 45	26	6 41	3 35	16 37	0 45	25 23	19 21	16 49
28	6 46	17	18 38	2 42	16 38	0 48	25 44	20 31	18 5
D	7 47	8	0 8 45	1 41	16 39	0 52	26 4	21 40	19 27
30	8 48	0	13 5	0 35	16 40	0 55	26 23	22 50	20 50
Days	u's rises	δ's rises	♀'s sets	♂'s sets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	0 m 22	11 a 0	6 4 22	4 2 57	7 20	12 n 51	18 0	24 53	18 51
7	0 2	10 52	6 25	rises	7 22	12 37	17 19	25 32	14 45
13	1 4 1	10 42	6 30	6 n 2	7 24	12 24	16 39	25 44	11 48
19	1 19	10 30	6 39	5 42	7 24	12 14	16 1	25 30	11 56
25	2 0	10 17	6 49	5 54	7 21	12 6	15 27	24 50	14 6

The LUNATIONS.

Full Moon the 2d day, at 39 minutes past 4 afternoon.

Last quarter the 9th day, at 17 minutes past 6 afternoon.

New Moon the 16th day, at 43 minutes past 4 afternoon.

First quarter the 24th day, at 11 minutes past 1 afternoon.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉	
1		7 57	4 3	21 8 57	18 n 38	6m 26	11 a 25	10 22	
2		7 58	4 2	22 6 20	3	☽ rises	morn	9 59	
3		7 59	4 1	22 14 20	24	5 a 6	0 17	9 35	
4		8 0	4 0	22 22 19	37	6 9	1 11	9 10	
5		8 1	3 59	22 29 17	43	7 16	2 6	8 45	
6	D 3 S. in Advent	8 2	3 58	22 36 14	46	8 29	3 0	8 19	
7	(Nichol.	8 3	3 57	22 43 10	58	9 44	3 53	7 53	
8	Conception	8 3	3 57	22 49 6	33	11 1	4 44	7 26	
9		8 4	3 56	22 55 1	45	morn	5 35	6 59	
10		8 5	3 55	23 0 3	10	0 18	6 25	6 32	
11		8 5	3 55	23 5 7	55	1 37	7 17	6 4	
12		8 6	3 54	23 10 12	15	2 53	8 8	5 35	
13	D 3 S. in Advent	Lucy 6	3 54	23 13 15	52	4 11	9 2	5 6	
14		8 7	3 53	23 17 18	32	5 24	9 57	4 37	
15		8 7	3 53	23 20 20	3	6 33	10 53	4 8	
16	O. Sap. Cam. Te.	En. W.	3 53	23 22 20	23	☽ sets	11 50	3 38	
17	Oxi. Term ends	8 8	3 52	23 24 19	32	5 a 0	0 a 44	3 9	
18		8 8	3 52	23 26 17	38	6 12	1 36	2 39	
19		8 8	3 52	23 27 14	54	7 20	2 25	2 9	
20	D 4 S. in Advent	8 8	3 52	23 28 11	33	8 26	3 11	1 31	
21	St. Thomas	Shor. d.	3 52	23 28 7	40	9 32	3 55	1 9	
22		8 8	3 52	23 28 3	44	10 36	4 37	0 38	
23		8 8	3 52	23 27 0	n 23	11 39	5 18	0 8	
24		8 8	3 52	23 26 4	28	morn	6 0	obe 22	
25	Christmas day	8 7	3 53	23 24 8	23	0 4	6 42	0 52	
26	St. Stephen	8 7	3 53	23 22 12	1	1 45	7 26	1 22	
27	D 5 S. in Advent	St John	3 53	23 19 15	13	2 51	8 12	1 51	
28	Holy Innocents	8 6	3 54	23 16 17	48	3 55	9 1	2 21	
29		8 6	3 54	23 12 19	35	5 0	9 52	2 50	
30		8 6	3 54	23 8 20	22	5 56	10 46	3 19	
31	Silvester	8 5	3 55	23 4 20	2	6 4	11 42	3 47	
Days	Day decreas. of day	Length of day	Helioc. long. h	Helioc. long. h	Helioc. long. f	Helioc. long. f	Helioc. long. f	Helioc. long. f	h sets
1	8 28	8 0	22 34	20 34	11 49	5 14	3 35	0 m 0	
7	8 40	7 54	22 46	20 58	12 15	5 14	2 44	11 42	
13	8 46	7 48	22 58	21 26	12 56	5 14	2 13	12 11	17
19	8 50	7 4	23 9	21 54	13 28	5 14	1 48	13 10	52
25	9 m. 2	7 46	23 21	22 23	14 15	5 13	1 16	14 10	28

1789.

December.

31

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	5 54	6 6	2 3	18m 15	2 14	0 n 55	2 n 27	2 27	1 n 34
7	5 57	6 3	2 6	17 56	2 13	0 56	2 39	2 22	0 50
13	5 59	6 1	2 7	17 37	2 12	0 57	2 52	2 13	0 6
19	6 1	5 59	2 7	17 18	2 11	0 59	3 4	1 58	0 35
25	6 1	5 59	2 6	16 59	2 9	1 1	3 16	1 39	1 11
M D	O's longitude		D's long.	D's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	9 48	53	25 8 3	0 3 5	16 42	0 m 59	26 42	24 7	22 m 15
2	10 49	48	8 II 3	1 43	16 43	1 27	1 25	2 3	23 41
3	11 50	43	21 37	2 48	16 44	1 47	19 26	18 25	8
4	12 51	39	4 59	3 45	16 46	1 7	27 37	27 28	26 35
5	13 52	37	18 36	4 30	16 48	1 9	27 54	28 37	28 3
D	14 53	35	2 23	5 0	16 50	1 11	28 10	29 46	29 32
7	15 54	35	16 20	5 13	16 52	1 13	28 26	0 m 55	1 1
8	16 55	36	0 m 23	5 8	16 54	1 15	28 42	2 3	2 31
9	17 56	38	14 30	4 43	16 56	1 16	28 57	3 12	4 1
10	18 57	42	28 40	4 2	16 59	1 18	29 12	4 20	5 31
11	19 58	46	12 51	3 6	17 1	1 19	29 26	5 28	7 2
12	20 59	51	27 0	1 58	17 3	1 20	29 39	6 36	8 33
D	22 0	58	11 m 6	0 44	17 6	1 20	29 52	7 44	10 5
14	23 2	6	25 6	0 n 33	17 9	1 21	0 m 4	8 51	11 37
15	24 3	14	8 1 58	1 46	17 11	1 21	0 15	9 59	13 9
16	25 4	23	22 37	2 53	17 14	1 R 21	0 26	11 0	14 41
17	26 5	33	6 v 3	3 48	17 17	1 21	0 37	12 13	16 13
18	27 6	43	19 11	4 30	17 20	1 21	0 47	13 20	17 46
19	28 7	53	2 m 2	4 57	17 23	1 20	0 57	14 26	19 19
D	29 9	3	14 35	5 9	17 26	1 20	1 9	15 32	20 52
21	30 10	14	26 52	5 6	17 29	1 19	1 17	16 39	22 25
22	1 11	25	8 56	4 50	17 32	1 18	1 24	17 45	23 59
23	2 12	36	20 51	4 22	17 35	1 16	1 30	18 51	25 32
24	3 13	46	2 v 42	3 42	17 39	1 15	1 35	19 57	27 6
25	4 14	57	14 33	2 53	17 42	1 13	1 40	21 2	28 40
26	5 16	8	26 30	1 56	17 45	1 11	1 44	22 7	0 v 15
D	6 17	18	8 38	0 53	17 46	1 9	1 48	23 11	1 50
28	7 18	28	21 2	0 14	17 52	1 7	1 52	24 15	3 25
29	8 19	38	3 II 45	1 22	17 56	1 5	1 55	25 19	5 0
30	9 20	48	16 49	2 27	18 0	1 2	1 58	26 23	6 36
31	10 21	57	0 26 16	3 26	18 5	0 50	1 50	27 27	8 12
Days	u ries	δ ries	♀ sets	♂ ries	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	10 a 32	10 a 1	7 a 5	6 m 16	7 s 1	12 n 0	4 56	23 s 44	16 s 51
7	10 7	9 45	7 16	6 4	7 14	11 57	4 31	2 17	19 34
13	9 42	9 26	7 30	7 7	7 8	11 55	4 12	0 30	21 53
19	9 14	9 5	7 47	7 33	7	11 57	4 0	24 23	37
25	8 47	8 41	7 57	7 55	6 51	12 0	3 57	16 4	24 38

IN the course of this year there will happen four eclipses, two of the Sun, and two of the Moon; as follows:

I. May 9th, ☾ eclipsed, invisible.

		h	m
Beginning	— — —	8	38 morning.
Middle	— — —	9	31
End	— — —	10	24

Digits eclipsed $2^{\circ} 54'$ on ☾'s northern limb.

II. May 24th, ☉ eclipsed, invisible.

The ☉ at 10 h. $20\frac{1}{2}$ m. in longitude $2^{\circ} 4' 3''$; the ☾'s lat. $30' \frac{1}{2}''$ S
The ☉ will be centrally eclipsed on the meridian at 10 h 18m in lon
 $154^{\circ} \frac{1}{2}$ west, and lat. $11^{\circ} \frac{1}{4}$ South

III. Nov. 2d, ☾ eclipsed, visible.

		h	m
Beginning	— — —	11	$27\frac{3}{4}$ night.
Middle	— — —	12	$32\frac{1}{4}$
End	— — —	13	$36\frac{1}{4}$

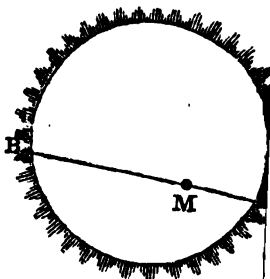
Digits eclipsed, $3^{\circ} 40'$ on ☾'s southern limb.

IV. Nov. 16th, ☉ eclipsed, invisible.

The ☉ at 15 h 29 m in long. $7^{\circ} 25' 16''$, the ☾'s lat. $33' \frac{1}{2}''$
The ☉ will be centrally eclipsed on the meridian,
15 h 22 m in long. $129^{\circ} \frac{1}{2}$ east, and lat. $14^{\circ} \frac{3}{4}$ north.

TRANSIT OF MERCURY.

There will this year be a transit of the planet Mercury over the disc of the sun, on Nov. 5, beginning at 1 h 10 m. afternoon, when ☿'s lat. is $9\frac{1}{2}''$ f. and ending at 6 h. 4 m. afternoon, when ☿'s lat. is $5\frac{1}{2}''$ f. In the annexed figure B is beginning, E the end, and M is the place of ☿ at 4 h. 40 m. when the sun sets.



Obliquity of the
Ecliptic.

Equation of the Equi-
noctial Points.

Jan. 1.	23°	27'	55''.	8	-	-	-	+	16''.	4
April 1.	23	27	55.	0	-	-	-	+	15.	8
July 1.	23	27	54.	1	-	-	-	+	15.	0
Oct. 1.	23	27	53.	3	-	-	-	+	14.	1
Dec. 31.	23	27	52.	6	-	-	-	+	13.	1

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	JANUARY				FEBRUARY				MARCH				APRIL				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	4	45	5	1	5	14	5	32	4	16	4	34	5	25	5	49	1
2	5	17	5	35	5	53	6	17	4	51	5	11	6	17	6	47	2
3	5	54	6	14	6	43	7	11	5	32	5	56	7	18	7	52	3
4	6	36	7	0	7	42	8	14	6	23	6	52	8	25	9	2	4
5	7	25	7	53	8	50	9	29	7	23	7	57	9	38	10	11	5
6	8	22	8	55	10	7	10	47	8	31	9	12	10	51	11	26	6
7	9	28	10	7	11	26			9	50	10	29	11	58			7
8	10	43	11	20	0	4	0	36	11	6	11	42	0	28	0	58	8
9	11	55			1	8	1	38	0	15			1	26	1	54	9
10	0	31	1	4	2	8	2	34	0	47	1	16	2	22	2	50	10
11	1	36	2	6	2	57	3	16	1	44	2	22	3	5	3	23	11
12	2	36	3	3	3	32	3	49	2	38	2	58	3	41	3	59	12
13	3	18	3	36	4	5	4	25	3	16	3	34	4	16	4	37	13
14	3	53	4	11	4	45	5	6	3	51	4	9	4	59	5	21	14
15	4	30	4	49	5	26	5	50	4	29	4	49	5	43	6	7	15
16	5	10	5	31	6	17	6	44	5	11	5	34	6	33	6	52	16
17	5	53	6	18	7	13	7	44	5	59	6	25	7	25	7	52	17
18	6	45	7	12	8	15	8	48	6	53	7	21	8	21	8	50	18
19	7	41	8	13	9	22	9	55	7	51	8	22	9	20	9	48	19
20	8	46	9	20	10	28	10	50	8	54	9	26	10	16	10	41	20
21	9	56	10	29	11	30	11	58	9	59	10	38	11	9	11	36	21
22	11	0	11	32			0	23	10	56	11	24		0	0	3	22
23			0	4	0	48	1	11	11	51			0	32	0	50	23
24	0	32	0	58	1	33	1	53	0	16	0	39	1	14	1	37	24
25	1	23	1	46	2	14	2	35	1	2	1	23	2	1	2	26	25
26	2	10	2	31	2	52	3	6	1	45	2	6	2	47	3	5	26
27	2	49	3	2	3	21	3	33	2	26	2	46	3	23	3	40	27
28	3	17	3	30	3	47	4	0	3	3	3	18	3	57	4	14	28
29	3	43	3	56					3	34	3	49	4	35	4	58	29
30	4	10	4	24					4	5	4	22	5	20	5	44	30
31	4	40	4	57					4	42	5	3					31

This Table may serve the following Places, by adding

	h	m
For Tinnmouth Haven, Hartle-pool, and Amsterdam	0	30
Brest	1	0
Scilly	1	45
Mount's Bay	1	55
Bridlington Pier and Humber	2	0

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	MAY				JUNE				JULY				AUGUST				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	6	11	6	40	7	47	8	18	8	16	8	51	10	19	10	44	1
2	7	9	7	39	8	50	9	21	9	25	10	1	11	17	11	50	2
3	8	11	8	44	9	58	10	33	10	34	11	8			0	19	3
4	9	19	9	56	11	6	11	39	11	41			0	45	1	11	4
5	10	28	11	2		11	0	11	0	15	0	45	1	34	1	58	5
6	11	35			0	42	1	11	1	13	1	40	2	21	2	40	6
7	0	8	0	37	1	38	2	6	2	5	2	28	2	57	3	11	7
8	1	6	1	35	2	31	2	53	2	49	3	7	3	25	3	38	8
9	2	3	2	29	3	11	3	29	3	22	3	36	3	51	4	5	9
10	2	52	3	12	3	44	4	0	3	49	4	3	4	19	4	25	10
11	3	29	3	46	4	15	4	33	4	16	4	32	4	52	5	9	11
12	4	2	4	21	4	51	5	8	4	49	5	5	5	26	5	47	12
13	4	41	5	6	5	24	5	42	5	21	5	39	6	14	6	36	13
14	5	19	5	40	6	3	6	24	5	59	6	20	7	3	7	33	14
15	6	2	6	24	6	46	7	8	6	44	7	7	8	4	8	39	15
16	6	49	7	12	7	32	7	58	7	33	8	3	9	16	9	53	16
17	7	37	8	2	8	26	8	54	8	34	9	7	10	31	11	8	17
18	8	29	8	56	9	25	9	56	9	43	10	17	11	41			18
19	9	24	9	52	10	28	11	0	10	54	11	30	0	18	0	50	19
20	10	21	10	49	11	33					0	6	1	20	1	49	20
21	11	18	11	46	0	5	0	36	0	39	1	11	2	17	2	44	21
22			0	15	1	6	1	35	1	41	2	11	3	4	3	23	22
23	0	42	1	8	2	4	2	33	2	36	2	59	3	41	3	57	23
24	1	36	2	2	2	55	3	15	3	17	3	35	4	16	4	36	24
25	2	28	2	51	3	34	3	51	3	52	4	9	4	56	5	17	25
26	3	11	3	29	4	10	4	29	4	29	4	50	5	42	6	7	26
27	3	47	4	5	4	49	5	10	5	10	5	31	6	36	7	5	27
28	4	25	4	47	5	32	5	54	5	56	6	23	7	37	8	8	28
29	5	8	5	30	6	20	6	43	6	50	7	19	8	42	9	16	29
30	5	55	6	22	7	15	7	44	7	51	8	25	9	49	10	22	30
31	6	49	7	16					9	0	9	35	10	54	11	25	31

	Adding	h	m
For Fowey, Loo and Plymouth	— — — —	3	10
Dartmouth, Harbrough and Hull	— — — —	3	30
Torbay and Tinmouth	— — — —	3	40
Exmouth, Topsham and Lime	— — — —	3	50
Weymouth	— — — —	4	20
Bridgewater and Texel	— — — —	4	40
Portland and Hartlew	— — — —	5	50

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	11	53					0	18	0	50	1	13	0	58	1	24	1
2	0	20	0	45	0	41	1	3	1	36	2	0	1	49	2	15	2
3	1	7	1	30	1	24	2	46	2	24	2	44	2	40	3	0	3
4	1	51	2	12	2	7	2	27	3	2	3	20	3	18	3	36	4
5	2	34	2	49	2	47	3	3	3	35	3	51	3	53	4	11	5
6	3	5	3	19	3	18	3	33	4	8	4	27	4	30	4	50	6
7	3	32	3	46	3	48	4	4	4	48	5	9	5	10	5	32	7
8	4	0	4	16	4	20	4	38	5	30	5	55	5	55	6	21	8
9	4	33	4	51	4	59	5	20	6	22	6	49	6	48	7	15	9
10	5	10	5	31	5	43	6	9	7	18	7	49	7	44	8	16	10
11	5	53	6	20	6	37	7	6	8	22	8	56	8	51	9	25	11
12	6	48	7	17	7	38	8	11	9	31	10	5	9	59	10	34	12
13	7	49	8	23	8	47	9	22	10	39	11	13	11	9	11	43	13
14	9	1	9	39	9	59	10	34	11	48				0	17		14
15	10	16	10	53	11	9	11	42	0	19	0	50	0	47	1	17	15
16	11	29					0	15	1	20	1	48	1	46	2	15	16
17	0	2	0	34	0	45	1	14	2	16	2	43	2	39	2	59	17
18	1	4	1	32	1	43	2	21	3	4	3	23	3	17	3	34	18
19	2	1	2	29	2	36	2	59	3	41	3	57	3	49	4	4	19
20	2	51	3	11	3	19	3	38	4	16	4	36	4	21	4	39	20
21	3	30	3	47	3	56	4	13	4	55	5	14	4	55	5	12	21
22	4	6	4	25	4	36	4	57	5	35	5	56	5	30	5	48	22
23	4	46	5	8	5	19	5	41	6	19	6	43	6	8	6	30	23
24	5	32	5	56	6	6	6	32	7	5	7	29	6	52	7	15	24
25	6	22	6	52	6	57	7	23	7	55	8	22	7	40	8	6	25
26	7	2	7	51	7	52	8	21	8	49	9	16	8	34	9	2	26
27	8	23	8	55	8	49	9	18	9	44	10	12	9	34	10	5	27
28	9	27	9	59	9	46	10	15	10	40	11	7	10	36	11	7	28
29	10	28	10	56	10	42	11	9	11	36			11	39			29
30	11	25	11	54	11	36			0	6	0	33	0	11	0	41	30
31					0	2	0	26					1	9	1	35	31

Subtracting

h m

For Leigh, Maes, and Gouries Gut	—	—	—	—	0	5
Gravelend, Rochester, and Rammekins	—	—	—	—	1	20
Buoy of the Nore and Flushing	—	—	—	—	1	30
Portsmouth, Ostend, Shoe-Beacon, and Red-Sand	—	—	—	—	2	0
Harwich, Dover, Spithead, and Calais	—	—	—	—	3	0
Gunfleet, Hastings, Shoreham, Orfordness, and Diep	—	—	—	—	4	0
Yarmouth Pier and Needle	—	—	—	—	4	40
St. Helen's and Havre-de-Grace	—	—	—	—	5	30

The Eclipses of Jupiter's

JANUARY	FEBRUARY	MARCH	APRIL
Immersion	Emersions	Emersions	Emersions
1 1 12 15	1 23 50 26	2 7 30 36	1 9 47 11
2 19 39 47	3 18 18 52	4 1 59 42	3 4 16 27
4 14 7 28	5 12 47 21	5 20 28 48	4 22 45 43
6 8 35 8	7 7 15 52	7 14 57 56	6 17 14 57
8 3 2 53	9 1 44 27	9 9 27 4	8 11 44 10
9 21 30 39	10 20 13 3	11 3 56 15	10 6 13 23
11 15 58 27	12 14 41 44	12 22 25 27	12 0 42 35
13 10 26 21	14 9 10 25	14 16 54 40	13 19 11 48
Emersions	16 3 39 12	16 11 23 53	15 13 40 59
15 7 8 54	17 22 8 2	18 5 53 6	17 8 10 8
17 1 36 52	19 16 36 50	20 0 22 20	19 2 39 16
18 20 4 52	21 11 5 42	21 18 51 35	20 21 8 23
20 14 32 55	23 5 34 36	23 13 20 50	22 15 37 29
22 9 0 58	25 0 3 34	25 7 50 6	24 10 6 32
24 3 29 4	26 18 32 33	27 2 19 23	26 4 35 36
25 21 57 14	28 13 1 34	28 20 48 39	27 23 4 36
27 16 25 28		30 15 17 54	29 17 33 34
29 10 53 44			
31 5 22 5			
MAY	JUNE	JULY	AUGUST
Emersions	Emersions	The Eclipses of Jupiter's Satellites will not be visible this month, Jupiter being too near the Sun.	
1 12 2 34	2 8 38 44		
3 6 31 29	4 3 7 10	The Eclipses of the Satellites of Jupiter will not be visible this month, Jupiter being too near the Sun.	
5 1 0 23	5 21 35 34		
6 19 29 16	7 16 3 57		
8 13 58 5	9 10 32 19		
0 8 26 54	11 5 0 39		
2 2 55 41	12 23 29 0		
3 21 24 25	14 17 57 20		
5 15 53 9	16 12 25 39		
7 10 21 50	18 6 53 58		
9 4 50 29	20 1 22 16		
0 23 19 7	21 19 59 34		
2 17 47 42	23 14 18 52		
4 12 16 16	25 8 47 10		
6 6 44 49	27 3 15 29		
8 1 13 20	28 21 43 48		
9 19 41 49	30 16 12 9		
1 14 10 18			

first Satellite for 1789.

SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Immersion	Immersion	Immersion	Immersion
2 7 10 39	2 9 25 27	1 11 34 6	1 13 30 35
4 1 39 46	4 3 54 30	3 6 2 31	3 7 58 16
5 20 8 53	5 22 23 26	5 0 30 52	5 2 25 54
7 14 38 1	7 16 52 25	6 18 59 10	6 20 53 29
9 9 7 10	9 11 21 18	8 13 27 25	8 15 21 3
11 3 36 18	11 5 50 12	10 7 55 37	10 9 48 37
12 22 5 25	13 0 19 3	12 2 23 47	12 4 16 8
14 16 34 34	14 18 47 52	13 20 51 53	13 22 43 41
16 11 3 41	16 13 16 40	15 15 19 57	15 17 11 10
18 5 32 49	18 7 45 26	17 9 47 58	17 11 38 41
20 0 1 55	20 2 14 9	19 4 15 57	19 6 6 9
21 18 31 3	21 20 42 50	20 22 43 52	21 0 33 39
23 13 0 9	23 15 11 27	22 17 11 44	22 19 1 8
25 7 29 14	25 9 40 6	24 11 39 36	24 13 28 37
27 1 58 19	27 4 8 39	26 6 7 25	26 7 56 7
28 20 27 24	28 22 37 11	28 0 35 10	28 2 23 36
30 14 56 28	30 17 5 40	29 19 2 54	29 20 51 8
			31 15 18 40

The Times of the Eclipses contained in this Table, are adapted to the Meridian of the Royal Observatory at Greenwich, and afford an excellent Method to discover the Longitude, or Difference of Meridians, between that and any other Place; which I shall illustrate by an EXAMPLE:

Suppose on the 28th Day of December of this Year, the Time of the Immersion of Jupiter's first Satellite be observed (by a Telescope) in an unknown Meridian, to happen at 4 h, 11 min. 56 sec. at night; I find by the Table, that the Time of this Immersion will happen at the British Observatory, at 2 h. 23 min. 36 sec. the same day: The Difference of the Times is 1 hour 48 min. 20 sec. which being converted into Degrees and Minutes of the Equator, will make 27 deg. 5 min. the Longitude of the Place of Observation, to the East, because the Time is more than that at the British Observatory.

Speculum Phænomenorum

JANUARY

3	♂ in aphelio
8	♂ in apogeo
11	♂ 24 11h.
14	♂ 24 0h.
19	☉ in ☿ 0h. 38m.
20	♂ in apogeo
22	♂ ♀ 22h.
23	♂ ☉ 6h.
25	♂ ♂ 3h.
25	♂ ♂ 15h.
28	♂ ♀ 6h.

FEBRUARY

4	♂ in apogeo
7	♂ 24 16h.
9	♀ in ☿
14	♂ in ☿
16	♂ in perigeo
17	☉ in ♄ 15h. 28m.
19	♂ in perihelio
20	♂ elong. max.
22	♂ ♀ 7h.
23	♂ ♂ 7h.
25	♂ ♀ 1h.
26	♂ ♂ 0h.
28	♂ stationary

MARCH

3	♂ ☉ 4½h.
3	♂ in apogeo
6	♂ 24 23h.
8	♂ ☉ 9h.
13	♀ in aphelio
16	24 stationary
16	♂ in perigeo
19	☉ in ♀ 15h. 53m.
23	♂ stationary
24	♂ ♂ 3h.
24	♂ ♂ 11h.
24	♂ ♀ 14h.
24	♂ ♀ 16h.
24	♂ in perihelio
24	♂ in ☿
30	♂ in apogeo

APRIL

3	♂ 24 8h.
4	♂ elong. max.
4	♂ in aphelio
9	♂ ☉ 20h.
12	♂ in perigeo
19	☉ in ♂ 4h. 38m.
21	♂ ♀ 9h.
22	♂ ♂ 17h.
23	♂ ♂ 2h.
24	♂ ♀ 2h.
26	♂ in apogeo
30	♂ 24 8h.

MAY

8	♂ eclipsed, invis.
9	♂ in perigeo
13	♂ in ☿
15	♂ ☉ 1h.
18	♂ ♀ 16h.
18	♂ in perihelio
20	☉ in ♄ 5h. 13m.
21	♂ ♂ 19h.
24	♂ ♀ 7h.
24	♂ in apogeo
24	☉ eclipsed, invis.
25	♂ ♂ 10h.
28	♂ 24 7h.
30	♂ ☉ 20h.

JUNE

2	♀ in ☿
5	♂ in perigeo
13	☉ ☉ 5h.
15	♂ ♀ 3h.
17	♂ elong. max.
19	♂ ♂ 19h.
20	♂ in ☿
20	♂ in apogeo
20	☉ in ☿ 13h. 55m.
23	♂ ♀ 6h.
24	♂ ♂ 14h.
24	♂ 24 22h.
29	☉ in aphelio
30	♂ in aphelio

ad Annum 1789.

JULY		AUGUST		SEPTEMBER	
1	♂ stationary	2	♂ ☉ 24 12h.	4	♂ ♀ ☉ 19h.
3	♀ in perihelio	4	♀ elong. max.	9	☉ in apogeo
3	☉ in perigeo	8	♂ ♀ ☉ 16h.	11	♂ ☉ ♀ 20h.
4	♂ stationary	9	♀ in ☉	14	♂ ♂ ☉ 5h.
12	♂ ♀ ☉ 11h.	13	☉ in apogeo	16	♂ ♀ ☉ 10h.
14	♂ ☉ ♀ 15h.	14	♀ in perihelio	16	♀ in ☉
17	☉ in apogeo	16	♂ ♂ ☉ 14h.	20	♂ ♀ ☉ oh.
18	♂ ♂ ☉ 19h.	19	♂ ♀ ☉ 14h.	20	♂ ♀ ☉ 23h.
21	♂ ♀ ☉ 11h.	19	♂ ♀ ☉ 21h.	21	♀ in ☉
22	♂ ♀ ☉ 18h.	22	♂ ♀ ☉ oh.	22	☉ in perigeo
22	☉ in ☉ oh. 44m.	22	☉ in ☉ 7h. 3m.	22	☉ in ☉ 3h. 28m.
23	♂ ♀ ☉ 5h.	26	☉ in perigeo	27	♀ in aphelio
26	♀ stationary	28	♂ ☉ ♀ 12h.		
28	♂ in ☉				
29	☉ in perigeo				
OCTOBER		NOVEMBER		DECEMBER	
1	♂ ♀ ☉ 20h.	2	☉ eclipsed visib.	7	♂ ♂ ☉ 21h.
7	☉ in apogeo	3	☉ in apogeo	7	☉ ☉ ♀ 23h.
12	♂ ♂ ☉ 17h.	5	♂ ☉ ♀ 3h.	8	♂ ♀ ☉ 2h.
13	♀ elong. max.	5	♀ in ☉	13	♀ in ☉
14	♂ ♀ ☉ 3h.	9	♂ ♂ ☉ 23h.	13	☉ in perigeo
19	♂ ♀ ☉ 21h.	10	☉ ☉ ♂ 8h.	15	♂ ♀ ☉ 8h.
19	☉ in perigeo	10	♂ ♀ ☉ 17h.	16	♀ stationary
20	♂ ♀ ☉ 22h.	10	♀ in perihelio	20	♂ ♀ ☉ 2h.
22	☉ in ☉ 11h. 24m.	14	♀ stationary	20	☉ in ☉ 19h. 59m.
24	♀ in aphelio	15	♂ ♀ ☉ 8h.	22	♂ ♀ ☉ 17h.
25	♀ stationary	16	☉ in perigeo	24	♀ in aphelio
29	♂ ♀ ☉ 1h.	16	☉ eclipsed, invisible	27	☉ in apogeo
		19	♂ stationary	28	☉ in perihelio
		20	♂ ♀ ☉ oh.		
		21	☉ in ☉ 7h. 37m.		
		21	☉ ☉ ♀ 16h.		
		22	♀ elong. max.		
		25	♂ ♀ ☉ 7h.		
		30	☉ in apogeo		

A Table of the Sun's semi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 49		Lat. 50		Lat. 51		Lat. 52		Lat. 53		Lat. 54	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	6	8	6	8	6	8	6	9	6	9	6	9
2	6	12	6	13	6	13	6	14	6	14	6	15
3	6	17	6	18	6	18	6	19	6	19	6	20
4	6	22	6	22	6	22	6	24	6	25	6	25
5	6	26	6	27	6	27	6	29	6	30	6	31
6	6	31	6	32	6	33	6	34	6	36	6	37
7	6	36	6	37	6	38	6	40	6	41	6	43
8	6	41	6	42	6	43	6	45	6	47	6	48
9	6	45	6	47	6	48	6	50	6	52	6	54
10	6	50	6	52	6	54	6	56	6	58	7	0
11	6	55	6	57	6	59	7	1	7	3	7	6
12	7	0	7	2	7	4	7	7	7	9	7	12
13	7	5	7	7	7	10	7	12	7	15	7	18
14	7	10	7	13	7	15	7	18	7	21	7	24
15	7	15	7	18	7	21	7	24	7	27	7	31
16	7	21	7	24	7	27	7	30	7	33	7	37
17	7	26	7	29	7	33	7	36	7	40	7	44
18	7	31	7	35	7	38	7	42	7	46	7	51
19	7	37	7	41	7	45	7	49	7	53	7	58
20	7	43	7	47	7	51	7	55	8	0	8	5
21	7	49	7	53	7	57	8	3	8	7	8	12
22	7	55	7	59	8	4	8	9	8	14	8	20
23	8	1	8	6	8	11	8	16	8	22	8	28
24	8	7	8	12	8	18	8	24	8	30	8	36

By these Tables the Times of the Sun's Rising and Setting may be found, in any Part of the Kingdom of *Great-Britain* or *Ireland*, after the following Manner: Where the Latitude of the Place is known, take the Sun's Declination out of the Table, on the Noon of the Day you desire to know the Time of his Rising and Setting; and with it, according as it is either North or South, enter these Tables in the Left-

of his visible half Duration above the Horizon.

The Sun's Declination South.

Degr.	Lat. 49		Lat. 50		Lat. 51		Lat. 52		Lat. 53		Lat. 54	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	5	59	5	59	5	58	5	58	5	58	5	58
2	5	54	5	54	5	53	5	53	5	53	5	53
3	5	49	5	49	5	49	5	48	5	48	5	47
4	5	45	5	44	5	44	5	43	5	42	5	42
5	5	40	5	39	5	39	5	38	5	37	5	36
6	5	35	5	35	5	34	5	33	5	31	5	30
7	5	31	5	30	5	29	5	27	5	26	5	25
8	5	26	5	25	5	23	5	22	5	21	5	19
9	5	21	5	20	5	18	5	17	5	16	5	13
10	5	17	5	15	5	13	5	11	5	10	5	8
11	5	12	5	10	5	8	5	6	5	4	5	2
12	5	7	5	5	5	3	5	0	4	58	4	56
13	5	2	5	0	4	57	4	55	4	52	4	50
14	4	57	4	54	4	52	4	49	4	47	4	44
15	4	52	4	49	4	46	4	44	4	41	4	37
16	4	46	4	45	4	41	4	38	4	34	4	31
17	4	41	4	38	4	35	4	32	4	28	4	23
18	4	36	4	33	4	29	4	26	4	22	4	18
19	4	30	4	27	4	23	4	19	4	15	4	11
20	4	25	4	21	4	17	4	13	4	9	4	4
21	4	19	4	15	4	11	4	6	4	2	3	57
22	4	13	4	9	4	4	4	0	3	55	3	50
23	4	7	4	2	3	58	3	53	3	47	3	42
24	4	1	3	56	3	51	3	46	3	40	3	34

Left-hand Column, under the Word Degrees; then look the Latitude of the Place in the Top of the Table; and in that Column, against the Sun's Declination, will be found the Time of his visible half Duration above the Horizon, or Time of his Setting, correct by Refraction; then subtract the Time of his Setting from 12 Hours, the Remainder will be the Time of his Rising; double the Time of his Setting, the

A Table of the Sun's semi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 60	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	6	9	6	10	6	10	6	10	6	11	6	11
2	6	15	6	16	6	16	6	17	6	17	6	18
3	6	21	6	22	6	22	6	23	6	24	6	25
4	6	27	6	28	6	29	6	30	6	31	6	32
5	6	32	6	34	6	35	6	36	6	38	6	39
6	6	38	6	40	6	41	6	43	6	44	6	46
7	6	44	6	46	6	48	6	49	6	51	6	53
8	6	50	6	52	6	54	6	56	6	58	7	1
9	6	56	6	58	7	1	7	3	7	5	7	8
10	7	2	7	5	7	7	7	10	7	13	7	16
11	7	8	7	10	7	14	7	17	7	20	7	23
12	7	15	7	18	7	21	7	24	7	27	7	31
13	7	21	7	24	7	28	7	31	7	35	7	39
14	7	28	7	31	7	35	7	39	7	43	7	47
15	7	34	7	39	7	42	7	46	7	51	7	56
16	7	41	7	45	7	49	7	54	7	59	8	4
17	7	48	7	52	7	57	8	1	8	7	8	13
18	7	55	8	0	8	5	8	10	8	16	8	22
19	8	2	8	7	8	13	8	19	8	25	8	32
20	8	10	8	15	8	21	8	28	8	35	8	42
21	8	18	8	24	8	30	8	37	8	45	8	53
22	8	26	8	32	8	39	8	47	8	55	9	4
23	8	34	8	41	8	49	8	57	9	6	9	16
24	8	43	8	51	8	59	9	8	9	18	9	29

the Sum will be the Length of the Day ; and double the Time of his Rising, the Sum will be the Length of the Night. But if the Latitude of the Place, and Declination of the Sun, consist of Degrees and Minutes, then a small Allowance must be made for the Minutes in both Cases, which may be done by a Person of an ordinary Capacity by a mental Proportion only. Thus, to find the Time of the Sun's Rising and Setting

of his visible half Duration above the Horizon.

The Sun's Declination South.

Degr.	Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 60	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	5	58	5	58	5	58	5	58	5	57	5	57
2	5	52	5	52	5	52	5	51	5	51	5	50
3	5	47	5	46	5	45	5	45	5	44	5	43
4	5	41	5	40	5	39	5	38	5	37	5	36
5	5	35	5	34	5	33	5	32	5	31	5	29
6	5	29	5	28	5	27	5	25	5	24	5	22
7	5	23	5	22	5	20	5	19	5	17	5	15
8	5	17	5	16	5	14	5	12	5	10	5	8
9	5	12	5	10	5	8	5	5	5	3	5	2
10	5	5	5	3	5	1	4	59	4	56	4	53
11	4	59	4	57	4	54	4	52	4	49	4	46
12	4	53	4	51	4	48	4	45	4	42	4	38
13	4	47	4	44	4	41	4	38	4	34	4	30
14	4	41	4	37	4	34	4	30	4	27	4	23
15	4	34	4	31	4	27	4	23	4	19	4	14
16	4	27	4	24	4	20	4	15	4	11	4	6
17	4	21	4	17	4	12	4	8	4	3	3	57
18	4	14	4	9	4	5	4	0	3	54	3	48
19	4	7	4	2	3	56	3	51	3	45	3	39
20	3	59	3	54	3	49	3	43	3	36	3	29
21	3	52	3	46	3	40	3	34	3	27	3	19
22	3	44	3	38	3	31	3	24	3	17	3	9
23	3	36	3	29	3	23	3	15	3	6	2	57
24	3	27	3	20	3	13	3	5	2	55	2	45

at Aberdeen in Scotland, on the Longest Day; the Latitude of that Place is accounted 57 Degr. 7 Min. North, and the Sun's Declination 23 Deg. 28 Min. likewise North. By these you will find by the Table, that 5 Min. for the Sun's Declination, and 1 Min. for the Latitude of the Place, are both, to be added to 8 Hours 29 Min. the Time belonging to 57 Degr. of Latitude and 23 Degr. of North Declination, and the Sum will be 8 Hours 35 Min. the Time of his apparent Setting at Aberdeen, on the longest Day, whose Complement to 12 Hours, viz. 3 Hours 5 Min. will be the Time of his Rising, &c.

A Table of the Sun's Right-Ascension in Time, the greatest

Deg.	♈			♉			♊			♋			♌			♍		
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
0	0	0	0	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23
1	0	3	40	1	55	27	3	55	25	6	4	22	8	12	54	10	12	12
2	0	7	20	1	59	17	3	59	36	6	8	43	8	17	3	10	16	0
3	0	11	0	2	3	8	4	3	48	6	13	5	8	21	11	10	19	48
4	0	14	41	2	6	59	4	8	0	6	17	26	8	25	19	10	23	35
5	0	18	21	2	10	51	4	12	13	6	21	48	8	29	26	10	27	22
6	0	22	2	2	14	44	4	16	26	6	26	9	8	33	31	10	31	8
7	0	25	42	2	18	37	4	20	40	6	30	30	8	37	37	10	34	54
8	0	29	23	2	22	31	4	24	55	6	34	51	8	41	41	10	38	40
9	0	33	4	2	26	25	4	29	10	6	39	11	8	45	45	10	42	25
10	0	36	45	2	30	20	4	33	26	6	43	31	8	49	48	10	46	9
11	0	40	26	2	34	16	4	37	42	6	47	51	8	53	51	10	49	53
12	0	44	8	2	38	13	4	41	59	6	52	11	8	57	52	10	53	37
13	0	47	50	2	42	10	4	46	16	6	56	31	9	1	53	10	57	20
14	0	51	32	2	46	8	4	50	34	7	0	50	9	5	53	11	1	3
15	0	55	14	2	50	7	4	54	52	7	5	8	9	9	53	11	4	46
16	0	58	5	2	54	7	4	59	10	7	9	26	9	13	52	11	8	28
17	1	2	40	2	58	7	5	3	29	7	13	44	9	17	50	11	12	10
18	1	6	23	3	2	8	5	7	49	7	18	1	9	21	47	11	15	52
19	1	10	7	3	6	9	5	12	9	7	22	18	9	25	44	11	19	34
20	1	13	51	3	10	12	5	16	29	7	26	34	9	29	40	11	23	15
21	1	17	35	3	14	15	5	20	49	7	30	50	9	33	35	11	26	56
22	1	21	20	3	18	19	5	25	9	7	35	5	9	37	29	11	30	37
23	1	25	6	3	22	23	5	29	30	7	39	20	9	41	23	11	34	18
24	1	28	52	3	26	29	5	33	51	7	43	34	9	45	16	11	37	58
25	1	32	18	3	30	35	5	38	12	7	47	47	9	49	9	11	41	39
26	1	36	25	3	34	41	5	42	34	7	52	0	9	53	1	11	45	19
27	1	40	12	3	38	49	5	46	55	7	56	12	9	56	52	11	49	0
28	1	44	0	3	42	57	5	51	17	8	0	24	10	0	43	11	52	40
29	1	47	48	3	47	6	5	55	38	8	4	35	10	4	33	11	56	20
30	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23	12	0	0

The time of the southing or meridian transits of the fixed stars in pa. 46, may be found thus. On the noon of the day, preceding the night in which you want to know the time of the southing of any of those stars; find the Sun's place in the Ephemeris, and with it take out of the above table his right ascension in time; this you may do by inspection to a minute, which will be sufficient for your present purpose. Then from the right ascension of the star in pa. 46, subtract the right ascension of the Sun, the remainder will be the estimate time of the star's southing, and will not differ from the true time above 2 or 3 minutes at most, which may be near enough for ordinary use. But when great exactness is required, reduce the Sun's place to this estimate time, and with it find in the above table his right ascension to seconds, which being subtracted from that of the star, the remainder will be the

Obliquity of the Ecliptic being $23^{\circ} 28'$.

Degr.	α			η			ζ			ν			μ			χ		
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
0	12	0	0	13	51	37	15	54	15	18	0	0	20	8	45	22	8	23
1	12	3	40	13	55	27	15	55	25	18	4	22	20	12	54	22	12	12
2	12	7	20	13	59	17	15	59	36	18	8	43	20	17	3	22	16	0
3	12	11	0	14	3	8	16	3	48	18	13	5	20	21	11	22	19	48
4	12	14	41	14	6	59	16	7	0	18	17	26	20	25	19	22	23	35
5	12	18	21	14	10	51	16	12	13	18	21	48	20	29	26	22	27	22
6	12	22	2	14	14	44	16	16	26	18	26	9	20	33	31	22	31	8
7	12	25	42	14	18	37	16	20	40	18	30	30	20	37	37	22	34	54
8	12	29	23	14	22	31	16	24	55	18	34	51	20	41	41	22	38	40
9	12	33	4	14	26	25	16	29	10	18	39	11	20	45	45	22	42	25
10	12	36	45	14	30	20	16	33	26	18	43	31	20	49	48	22	46	9
11	12	40	26	14	34	16	16	37	42	18	47	51	20	53	51	22	49	53
12	12	44	8	14	38	13	16	41	59	18	52	11	20	57	52	22	53	37
13	12	47	50	14	42	10	16	46	16	18	56	31	21	1	53	22	57	20
14	12	51	32	14	46	8	16	50	34	19	0	50	21	5	53	23	1	3
15	12	55	14	14	50	7	16	54	52	19	5	8	21	9	53	23	4	46
16	12	58	57	14	54	7	16	59	10	19	9	26	21	13	52	23	8	28
17	13	2	40	14	58	7	17	3	29	19	13	44	21	17	50	23	12	10
18	13	6	23	15	2	8	17	7	49	19	18	1	21	21	47	23	15	52
19	13	10	7	15	6	9	17	12	9	19	22	18	21	25	44	23	19	34
20	13	13	51	15	10	12	17	16	29	19	26	34	21	29	40	23	23	15
21	13	17	35	15	14	15	17	20	49	19	30	50	21	33	35	23	26	56
22	13	21	20	15	18	19	17	25	9	19	35	5	21	37	29	23	30	37
23	13	25	6	15	22	23	17	29	30	19	39	20	21	41	23	23	34	18
24	13	28	52	15	26	29	17	33	51	19	43	34	21	45	16	23	37	58
25	13	32	38	15	30	35	17	38	12	19	47	47	21	49	9	23	41	39
26	13	36	25	15	34	41	17	42	34	19	52	0	21	53	1	23	45	19
27	13	40	12	15	38	49	17	46	55	19	56	12	21	56	52	23	49	0
28	13	44	0	15	42	57	17	51	17	20	0	24	22	0	43	23	52	40
29	13	47	48	15	47	6	17	55	38	20	4	35	22	4	33	23	56	20
30	13	51	27	15	51	15	18	0	0	20	8	45	22	8	23	24	0	0

the true time of the star's culminating or southing. And if from the time of the star's southing you subtract the semidurnal arc belonging to it, the remainder will be the time of the star's rising; and being added to it, the sum will be the time of its setting.

Annexed is an Ex. of Sirius for Jan. 30, 1789.

	h	m	s
☉'s place at noon $\mu 11^{\circ} 24'$			
Rt. Asc. of Sirius - -	6	35	33
☉'s rt. asc. subtract - -	20	59	0
*'s estimate southing - -	9	36	33
☉'s rt. asc. at that time sub.	21	0	13
*'s true southing - -	9	35	20
Semid. arc sub. & add - -	4	36	55
*'s rising aftern. - -	4	58	25
*'s setting - -	14	12	15

A Table of the mean Right-Ascensions in time, Semidurnal-Arcs, Declinations, and Magnitudes of 40 remarkable fixed Stars, with their Names, and Bayer's Literal Characters, for January 1, 1782.

Names of the Stars	Ch.	Rt. Asc.			Declination			Semid. Ar.			Ma	
		h	m	s	°	'	"	h	m	s		
Pole star, Alruccabah	α	0	48	3	88	4	26	n	sets not		2	
Andromeda's girdle, Mirach	β	0	57	36	34	27	35	n	10	7	32	2
Andromeda's left foot, Almash	γ	1	50	36	41	16	30	n	sets not		2	
Ram's following horn	α	1	54	56	22	25	27	n	8	9	35	2
Whale's jaw, Menkar	α	2	50	54	3	13	26	n	6	19	48	2
Medusa's head, Algol	β	2	54	4	40	6	6	n	sets not		2	
Perseus's right side, Algenib	α	3	8	51	49	4	11	n	sets not		2	
Brightest of the 7 stars	α	3	34	34	23	25	2	n	8	16	40	3
Bull's south eye, Aldebaran	α	4	23	26	16	3	23	n	7	28	51	1
Auriga's left shoulder, Capella	α	5	0	37	45	44	59	n	sets not		1	
Orion's left foot, Rigel	β	5	4	4	8	28	3	n	5	20	28	1
Bull's north horn	β	5	22	32	28	24	22	n	8	57	1	2
Orion's left shoulder, Bellatrix	γ	5	23	27	6	8	10	n	6	34	41	2
Orion's girdle	α	5	25	10	1	21	24	s	5	56	42	2
Orion's right shoulder, Betelgeuse	α	5	43	23	7	20	59	n	6	40	58	1
In the great Dog's mouth, Sirius	α	6	35	33	16	25	14	n	4	36	55	1
Head of the 1st Twin, Castor	α	7	20	41	32	20	54	n	9	38	21	1
In the left Dog's thigh, Procyon	α	7	27	54	5	46	41	n	6	32	50	1
Head of the 2d Twin, Pollux	β	7	31	59	28	32	14	n	8	58	19	2
Hydra's heart, Alphard	α	9	16	53	7	43	21	n	5	24	20	2
Lion's heart, Regulus	α	9	56	45	13	1	32	n	7	11	28	1
Great Bear, Lower Pointer	β	10	48	34	57	32	47	n	sets not		2	
Great Bear, Upper Pointer	α	10	50	8	62	55	27	n	sets not		2	
Lion's tail, Deneb	β	11	37	56	15	47	28	n	7	27	18	2
Great Bear, 1st in the tail, Aliath	α	12	44	22	57	8	46	n	sets not		2	
Virgo's spike	α	13	13	44	10	1	2	s	5	12	20	1
Dragon's tail	α	13	58	30	65	25	19	n	sets not		2	
Bootes, Arcturus	α	14	5	46	20	20	5	n	7	55	26	1
Libra, Southern Scale	α	14	38	52	15	7	26	s	4	44	23	2
Libra, Northern Scale	β	15	5	18	8	33	59	s	5	19	57	2
Bright star in the North Crown	α	15	25	28	27	27	35	n	2	48	36	2
Scorpion's heart, Antares	α	16	16	4	25	55	50	n	3	34	6	1
Hercules's head, Raf. Algethi	α	17	4	48	14	39	2	n	7	20	41	2
Head of Serpentarius	α	17	24	49	12	44	2	n	7	9	50	2
Dragon's head, Rastaban	γ	17	52	34	51	31	19	n	sets not		2	
Bright star in the Harp, Lyra	α	18	29	33	38	35	19	n	sets not		1	
Bright star in the Eagle, Atair	α	19	40	8	8	18	10	n	6	45	57	2
Mouth of south Fish, Fomalhaut	α	22	45	34	30	46	17	n	2	52	6	1
Pegasus's wing, Markab	α	22	53	55	14	2	8	n	7	17	10	2
Andromeda's head	α	23	57	9	27	53	2	n	8	52	19	2

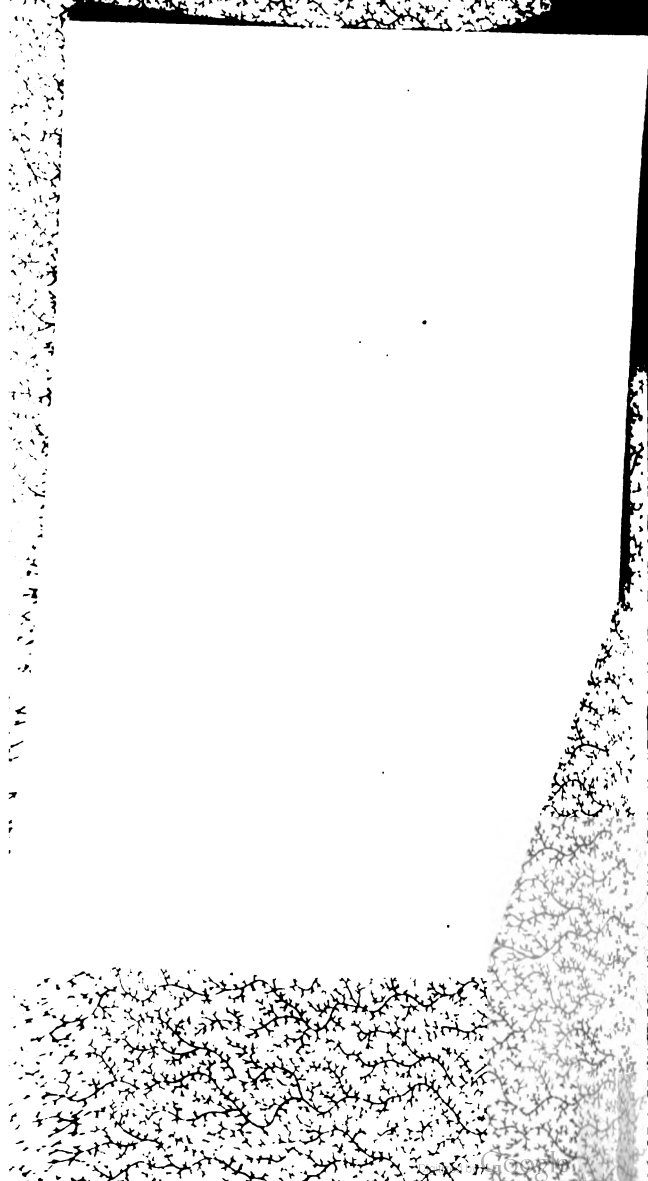
A Table of the Longitudes, Latitudes, and Magnitudes of the most remarkable fixed Stars that the Moon can Eclipse, or make a near Appulse unto; exactly rectified to the beginning of the year 1780.

Con.	Cha.	Long.	Lat.	Magn.	Con.	Cha.	Long.	Lat.	Magn.
X	♈	0 1 48	2 9 44 n	4	♈	♏	12 1 6	0 21 48 n	2
	♈	14 28 2	1 5 37 n	4		♏	17 56 14	1 49 14 s	3
	♈	16 48 2	0 13 11 s	4		♏	22 3 46	4 24 41 n	3
	♈	17 46 21	1 48 7 n	4		♏	24 18 10	4 2 52 n	4
	♈	26 55 21	4 1 36 n	3		♏	24 41 24	0 1 1 n	4
	♈	2 43 37	5 45 30 s	3		♏	26 47 49	3 29 24 n	4
	♈	5 23 14	2 35 37 s	3		♏	27 24 23	0 6 53 n	4
	♈	6 42 57	5 29 2 s	1		♏	29 30 5	1 57 17 s	3
	♈	19 30 14	5 21 59 n	2		♏	29 52 12	5 26 15 s	3
	♈	21 42 52	2 13 29 s	3		♏	♏ 7 10	1 2 18 n	2
II	♏	0 22 14	0 55 4 s	4	♏	♏	1 34 27	1 39 52 n	4
	♏	2 13 39	0 50 34 s	3		♏	4 43 50	4 0 23 s	4
	♏	5 1 57	6 46 12 s	2		♏	6 41 35	4 32 17 s	1
	♏	6 52 7	2 2 28 n	3		♏	8 23 19	6 5 21 s	4
	♏	15 27 6	0 12 19 s	3		♏	28 11 40	6 56 48 s	3
	♏	20 11 11	6 40 4 n	1		♏	♏ 8 35	2 22 24 n	4
	♏	4 28 28	3 10 22 n	4		♏	3 15 8	2 5 31 s	4
	♏	5 38 46	0 4 13 n	4		♏	7 6 25	3 55 22 s	3
	♏	18 35 0	3 1 57 s	4		♏	9 18 54	3 24 55 s	3
	♏	21 11 15	3 46 1 s	4		♏	11 46 9	5 2 33 s	3
Ω	♏	24 50 0	4 51 9 n	4	♏	♏	11 55 13	0 53 36 n	3
	♏	26 46 26	0 27 27 n	1		♏	13 10 58	1 28 7 n	4
	♏	3 19 2	0 8 29 n	4		♏	♏ 58 32	4 36 46 n	3
	♏	18 26 24	0 31 21 s	4		♏	17 7 37	4 57 31 s	4
	♏	21 58 9	3 2 51 s	4		♏	18 42 30	2 32 6 s	4
	♏	24 2 24	0 41 36 n	3		♏	20 27 42	2 33 40 s	3
	♏	0 17 47	5 4 42 n	3		♏	25 38 54	2 3 47 s	4
	♏	1 45 53	1 22 24 n	3		♏	♏ 11 19	2 43 22 n	4
	♏	7 6 18	2 48 57 n	3		♏	8 30 20	0 22 57 s	4
	♏	20 46 27	2 2 11 s	1		♏	14 4 16	1 2 8 s	4

This table shewing the mean longitudes of 60 stars to the beginning of the year 1780, their mean longitudes for any other time may be found if 50 $\frac{1}{2}$ seconds be added for each succeeding, and subtracted for each preceding year, and proportionably for a part of a year. Thus, to find the longitude of the first star ♈♏, or ♏ piscium, for Feb. 15, 1782, or 2 years and one eighth after the tabular time; here 2 $\frac{1}{8}$ times 50 $\frac{1}{2}$ sec. make 1' 47", which being added to the tabular longitude, gives ♏ 11' 6' 35" for the longitude required at the given time.—The latitudes vary not,

The Latitudes and Longitudes of Ninery Places.

	Lat.	Long.		Lat.	Long.
	° /	° /		° /	° /
Alexandria, Egypt	31 11 n	30 17 e	Isfahan	32 25 n	52 55 e
Amsterdam, Hol.	52 23 n	4 52 e	Land's end	50 6 n	5 50 w
Archangel, Ruf.	64 34 n	38 30 e	Leghorn	43 33 n	10 25 e
Athens	37 40 n	23 52 e	Leoftoff	52 38 n	1 54 e
Babelmandel	12 50 n	43 50 e	Leverpool	53 22 n	3 10 w
Batavia	6 12 s	106 45 e	Lima	12 1 s	76 50 w
Bengal	22 0 n	92 45 e	Lisbon	38 42 n	9 4 w
Berlin	52 33 n	13 26 e	Lizard	49 57 n	5 21 w
Bombay Isle	19 42 n	73 3 e	London	51 31 n	0 0
Boston, Amer.	42 25 n	70 37 w	Madras	13 8 n	80 7 e
Bresslau	51 3 n	17 13 e	Madrid	40 25 n	3 45 w
Brest	48 23 n	4 30 w	Manila	14 30 n	120 25 e
Bristol	51 28 n	2 30 w	Marseilles	43 18 n	5 21 e
Buenos Ayres	34 35 s	58 0 w	Mexico	19 54 n	100 5 w
Cadiz	36 31 n	6 7 w	Mississipi, mouth	29 0 n	89 17 w
Calais	50 58 n	1 51 e	Moscow	55 25 n	37 51 e
Cairo, Egypt	30 2 n	31 26 e	Naples	40 51 n	14 19 e
Cambridge	52 13 n	0 4 e	Newcastle	55 0 n	1 18 w
Canaria Islands	28 1 n	15 0 w	Oporto	40 53 n	8 35 w
Canton	23 8 n	113 2 e	Orkney I. northend	59 24 n	3 23 w
Cape of Goodhope	34 29 s	18 23 e	Oxford	51 45 n	1 16 w
Cape Horn	55 59 s	67 26 w	Paris	48 50 n	2 25 e
Carthegena	10 27 n	75 26 w	Pekin	39 55 n	116 22 e
Charles Town Am.	33 22 n	79 50 w	Petersburg	59 56 n	30 19 e
Constantinople	41 0 n	28 53 e	Philadelphia	39 57 n	75 18 w
Copenhagen	55 41 n	12 50 e	Plymouth	50 24 n	4 15 w
Corinth	37 30 n	23 0 e	Port Mahon	39 51 n	3 53 e
Corke	51 54 n	8 30 w	Port Royal, Jam.	17 40 n	76 37 w
Dantzic	54 22 n	18 36 e	Portsmouth	50 48 n	1 1 w
Dover	51 7 n	1 19 e	Prague	50 5 n	14 15 e
Dublin	53 12 n	6 55 w	Quebec	46 55 n	71 12 w
Edinburgh	55 58 n	3 1 w	Rome	41 54 n	12 32 e
Ferro, Isle	27 48 n	18 6 w	Scilly Isles	50 0 n	6 45 w
Finisterre, Cape	42 57 n	9 36 w	Smyrna	38 28 n	27 25 e
Genoa	44 25 n	8 41 e	Stockholm	59 22 n	18 12 e
Gibraltar	36 5 n	4 46 w	Syracuse	37 4 n	15 20 e
Glasgow	55 52 n	4 5 w	Tangier	35 55 n	5 45 w
Goa	15 31 n	73 50 e	Teneriff	28 16 n	16 31 w
Gottingen	51 32 n	9 58 e	Tunis	36 47 n	10 16 e
Greenwich	51 29 n	0 5 e	Turin	45 5 n	7 45 e
Hacluit's Head.	79 55 n	12 0 e	Venice	45 27 n	12 24 e
Halifax, America	44 46 n	63 20 w	Verd. Cape	14 47 n	17 28 w
Havanna	23 12 n	81 11 w	Vienna	48 11 n	16 28 e
Helena, I. St.	15 55 s	5 49 w	Upsal	59 52 n	17 43 e
Jerusalem	31 50 n	35 25 e	Uraniberg	55 54 n	12 52 e



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